

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

MAY 1 2009

Reply to the attention of: WG-15J

William Creal, Chief Water Bureau Michigan Department of Environmental Management P.O. Box 30273 Lansing Michigan 48909-7773

Dear Mr. Creal:

Enclosed is the U.S. Environmental Protection Agency's Enforcement Verification (EV) of the Upper Peninsula Office of the Michigan Department of Environmental Quality (MDEQ) Public Water System Supervision Program. The EV was conducted at MDEQ's Upper Peninsula (UP) District Office during the week of May 30, 2006. The purpose of the EV was to determine if the enforcement processes outlined in the Michigan Compliance Strategy and enforcement flow charts were being followed; and to verify the accuracy and completeness of the enforcement documentation in system files and computerized data bases, and compare this information with information MDEQ reported to the Federal Safe Drinking Water Information System. Since that time, Region 5 made draft report findings available to MDEQ and the Local Health Departments (LHD). The final report incorporates the comments received from the UP District Office, six UP LHDs, the MDEQ Lansing Operations Division Community Drinking Water Unit (DWU), and Noncommunity DWU.

The most significant findings are contained in the Executive Summary. A summary of LHD strengths and weaknesses is in Section 4.2.1 "NCWS Overview of EV Findings." Commendations and recommendations for community water system (CWSs) are in section 4.1.4, and in Appendices C-H for noncommunity water systems (NCWSs) in each LHD.

The report also includes findings for each violation reviewed; for CWSs in Appendix B, and for NCWSs in each LHD in Appendices C-H. Summary findings and Region 5 commendations and recommendations for each LHD are also included in Appendix C-H.

We will follow-up with you on the major recommendations through the FY 2010 Annual Resource Deployment Plan. The major focus areas will include:

- 1. Issue, amend, and/or supplement written CWS and NCWS programs Total Coliform Rule guidance and flow charts including proper sampling procedures after a system disinfects following a MCL violation.
- 2. Clarify or amend fines policy and procedures.
- 3. Address WaterTrack limitations for tracking lead and copper monitoring compliance and ensure LHDs implement the LCR Minor Revisions.

We recognize it has been a long time since the EV was performed. A multi level review and coordination between numerous offices (local, District, Lansing community DWU and noncommunity DWU, and EPA) have helped inform and focus the report. Several items have been resolved and, as identified above, some remain outstanding.

We would again like to thank your staff for their helpfulness during our visit, and in follow-up communications. Please feel free to contact Tom Murphy of my staff at (312) 886-9546 regarding any assistance Region 5 could provide with your compliance and enforcement activities.

Sincerely,

Tihka G. Hyde

Director, Water Division

Enclosures

cc: Jim Cleland, Chief, Lansing Operations Division, MDEQ
Richard Benzie, Chief, Community Drinking Water Unit
Richard Overmyer, Chief, Noncommunity Drinking Water Unit
Elger Brown, Chief, Drinking Water and Environmental Health Section
Steven Casey, District Supervisor, MDEQ Upper Peninsula District Office
Don DeGrand, Assistant Supervisor, MDEQ Upper Peninsula District Office

bcc: Tom Poy, Chief, Ground Water & Drinking Water Branch, U.S. EPA
Nick Damato, Deputy Chief, Ground Water & Drinking Water Branch, U.S. EPA
Ryan Bahr, Enforcement Team Leader, U.S. EPA
Jennifer Crooks, Michigan State Program Manager

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MAR 2 3 2009

Reply to the attention of: WG-15J

William Creal, Chief Water Bureau Michigan Department of Environmental Management P.O. Box 30273 Lansing Michigan 48909-773

Dear Mr. Powers:

Enclosed is EPA's Enforcement Verification (EV) of the Upper Peninsula Office of the Michigan Department of Environmental Quality (MDEQ) Public Water System Supervision Program. The EV was conducted at MDEQ's Upper Peninsula (UP) District Office during the week of May 30, 2006. The purpose of the EV was to determine if the enforcement processes outlined in the Michigan Compliance Strategy and enforcement flow charts were being followed; and to verify the accuracy and completeness of the enforcement documentation in system files and computerized data bases, and compare this information with information MDEQ reported to the Federal Safe Drinking Water Information System. Since that time, Region 5 made draft report findings available to MDEQ and the Local Health Departments (LHD). The final report incorporates the comments received from the UP District Office, six UP LHDs, the MDEQ Noncommunity Drinking Water Unit (DWU), and the Lansing Operations Division Community DWU.

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Sincerely,

Thomas Poy Chief, Ground Water & Drinking Water Branch

Enclosures

ce: Jim Cleland, Assistant Chief, Water Division, MDEQ Richard Benzie, Chief, Community Drinking Water Unit Richard Overmyer, Chief, Noncommunity Drinking Water Unit Elger Brown, Chief, Drinking Water and Environmental Health Section Steven Casey, District Supervisor, MDEQ Upper Peninsula District Office Don DeGrand, Assistant Supervisor, MDEQ Upper Peninsula District Office bcc: Nick Damato, Deputy Chief, Ground Water & Drinking Water Branch, U.S. EPA Ryan Bahr, Enforcement Team Leader, U.S. EPA



U. S. Environmental Protection Agency

Enforcement Verification of

UPPER PENINSULA DISTRICT OFFICE

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

PUBLIC WATER SYSTEM SUPERVISION PROGRAM

2009 Final Report

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EXECTIVE SUMMARY

During the week of May 30, 2006, Tom Murphy of Region 5 of the United States Environmental Protection Agency (U.S. EPA) conducted an enforcement verification (EV) audit of the Upper Peninsula (UP) District Office of the Michigan Department of Environmental Quality (MDEQ) Bureau of Water, drinking water program. Mr. Murphy reviewed community water systems (CWSs) overseen by the Water Bureau's Upper Peninsula District Office, and noncommunity water systems (NCWSs), overseen by the local health departments with oversight by MDEQ's Noncommunity Drinking Water Unit.

The purpose of the Enforcement Verification (EV) was to determine if the enforcement process, outlined in the Michigan Compliance Strategy and enforcement flow charts, is being followed; to verify the accuracy and completeness of the enforcement documentation in public water system supervision (PWSS) program files; and to compare the files with the enforcement and associated violation information that the PWSS program reported to the Federal Safe Drinking Water Information System (SDWIS/FED).

The team reviewed a total of 27 system files; 7 CWSs and 20 NCWSs. NCWSs were selected from each of the 6 local health departments (LHDs) in the UP. For the CWSs, the audit team reviewed 12 violations of the following types: 7 TCR maximum contaminant level (MCL); 1 Surface Water Treatment Rule (SWTR) treatment technique (TT); 3 TCR monitoring and reporting (M/R); and 1 state nitrate M/R violations. The team reviewed 53 violations at the NCWSs: 10 TCR monthly MCL (includes 2 unreported violation); 2 TCR acute MCL; 1 nitrate MCL; 19 TCR M/R (includes 1 unreported violation); 9 nitrate M/R; 1 nitrite M/R; 5 Lead and Copper Rule (LCR) M/R; 2 inorganic contaminant (IOC); 2 volatile organic (VOC); and 2 synthetic organic contaminant (SOC) M/R violations. The review of NCWSs also included review of LCR corrosion control treatment steps following 2 lead action level exceedances (ALEs) and 1 copper ALE.

Of the 12 CWS violations reviewed, enforcement procedures were not followed for 2 MCL violations. These 2 TCR MCL violations occurred at one CWS. The violations were reported late to SDWIS (after the EV). For the NCWSs reviewed, enforcement procedures were not followed for 31 of the 53 violations: 1 TCR acute MCL, 6 TCR monthly MCL, 9 TCR M/R, 7 nitrate M/R, 1 nitrite M/R, 2 LCR initial tap M/R, 1 LCR triennial tap M/R, 2 IOC M/R, 1 VOC M/R, and 1 SOC M/R violations. LCR corrosion control treatment steps were also not followed after 1 copper ALE at a NCWS.

MDEQ UP Ditrict Office Community Water System Program

Commendations

- Ensures that systems collect repeat samples very quickly following positive TCR routine samples
- Issues timely NOVs for TCR MCL violations, and for TCR and other M/R violations.
- Ensures that NOVs for M/R violations instruct systems to send back a signed/dated copy of the PN, and usually warns systems that they will receive a \$200 fine if they fail to PN.
- Reviews the content of PN notices for monthly TCR MCL violations and requires systems to correct problems.

Recommendations

- Discourage systems from taking TCR samples from hydrants.
- Needs to take steps to ensure the accurate entry of TCR sample results into the database.
- Issue guidance for proper sampling procedures after a system disinfects following MCL violations. The guidance should require chlorine residual level testing prior to TCR "check" sampling, and prohibit sampling where residual chlorine levels have not returned to normal operating levels.
- Promptly enter all TCR MCL violations into SDWIS/FED
- Ensure that, following a TCR MCL violation, the incident is properly documented including documentation in the system file that the well/system was disinfected and consecutive non detect check samples were collected, and that system was notified the violation was resolved.
- Issue NOVs to systems that fail to submit results for TCR samples taken to check the success of disinfection following an MCL violation, and amend MDEQ's State Administrative Fines Policy to include warnings and fines for check sample M/R violations.
- Improve tracking receipt of PNs for TCR MCL violations and filing them in system files. Implement the State Administrative Fines Policy to fine systems that fail to PN.

Noncommunity Water System Program

Commendations

- All LHDs issued NOVs for all detected TCR MCL violations reviewed, and an NOV was issued for the 1 nitrate violation reviewed.
- All LHDs' TCR MCL NOVs, and the nitrate MCL NOV reviewed properly instructed systems to notify customers about the violation, provided a sample PN, and allowed limited continued use of the water system with PN and precautionary measures (PMs) while the system investigated/resolved the problem. The nitrate MCL NOV also instructed the system to begin seeking a new water source. 5 of 6 LHDs' NOVs provided very thorough instructions regarding PMs the system must provide.
- LHDs issued timely NOVs for nearly all of the M/R violations reviewed (except for 2 of the 53 violations) and 5 of the 6 LHDs instructed systems to notify customers about the violation, and enclose a sample PN.
- MDEQ is commended for requiring campgrounds with multiple wells to collect TCR samples at each well during each monitoring period which is more stringent than the federal TCR.
- 5 LHDs had issued warnings and fines for M/R violations under the MDEQ's administrative fines policy and procedures. After the EV, the 6th LHD, Dickinson-Iron DHD advised R5 that it had begun issuing fines.

Recommendations

For NCWSs, there are a variety of different TCR, LCR, and other recommendations for each of the 6 LHDs. For TCR, these include recommendations relating to repeat monitoring instructions, follow-up actions, file documentation, tracking receipt of PNs for TCR MCL violations; monitoring reminder/fine warning notices and fines and NOVs requiring proof of PN for M/R violations; LCR monitoring instructions and action level exceedance follow-up, escalating enforcement for M/R SNCs; violation and enforcement action reporting to SDWIS. There are also recommendations for MDEQ to address program weaknesses noted during the EV some of which contributed to enforcement follow-up and violation reporting discrepancies. Most importantly, we recommend that MDEQ issue corrected and more comprehensive guidance for monitoring, violation follow-up, and fines.

We recommend MDEQ 1) amend and supplement written TCR guidance and flow charts to cover: assignment of monitoring frequencies, disinfecting depressurized seasonal systems before re-opening, sampling to check the success of disinfection after MCL violations, when and where to collect the 5 samples required the month following one or more positive samples; 2) ensure that the most current versions of MDEQ guidance on fines for TCR MCL violations are issued to and used by NCWS Unit and LHD staff; 3) clarify or amend fines policy and procedures for M/R violations; 4) address WaterTrack limitations for tracking LCR monitoring compliance and ensure that LHDs implement the LCR Minor Revisions; 5) continue to require LHDs to identify and enter any TCR sample results missing from WaterTrack; and 6) report correct begin date and duration of TCR MCL violations to SDWIS.

TCR Recommendations Include: (one or more apply to each of the 6 LHDs)

- Instruct systems not to collect TCR routine samples from raw water taps. Identify the location and date of the positive TCR routine sample in repeat monitoring reminder letters. Instruct systems that all 4 repeat samples must be collected on the same day within 24 hours of being notified of a positive routine sample result. Issue minor repeat M/R violations to systems failing to collect repeat samples on the same day. Document repeat monitoring reminders in system files. Immediately follow-up on acute TCR MCL violations and issue a written NOV to system as soon as possible. Report all TCR MCL violations to SDWIS/FED. For all MCL violations, ensure system provides the written documentation of: corrective actions it took; well/system disinfection, and 2 safe water samples as required by the NOV. Do not clear TCR MCL violations unless the non-detect check samples are collected at least 8 hours apart, and provide documentation of this in system files. Place systems that have a TCR MCL violation on quarterly monitoring for at least one year in accordance with state procedures. Instruct systems that have a TCR MCL violation to collect 5 routine samples the next month following the violation; place a copy of any official written waivers of this requirement in the system file, and document site visits in the system file. In NOVs for MCL violations, instruct systems to send back a sign/dated copy of PN, and warn of a fine of \$1,000 per day up to the maximum amount of fine per violation of \$2,000 for failure to post PN. Improve tracking receipt of PNs, and filing them in the system files, and fine system that fail to post PN.

Fine and NOV Recommendations Include: (one or more apply to each of the 6 LHDs)

- Establish deadlines before the end of the monitoring period for annual and less frequent monitoring. Issue monitoring reminder notices with \$200 fine warning 30-90 days before the end of the compliance period (CP). Impose \$200 fine on systems that fail to sample, set a new sample deadline, and warn of \$400 fine. Issue \$400 fines to systems that fail to sample by the new date, and base fine determinations on the number of violations within each contaminant group during the previous 12-month period as outlined in the administrative fines policy and procedures. Issue fine warnings for failure to submit periodic reports for the types of reports covered by the policy and procedures. In NOVs for M/R violations, instruct systems to send back a sign/dated copy of the PN. Issue formal NOVs with request for informal hearing within 30 days after systems become M/R Significant Noncompliers.

Lead and Copper Recommendations Include: (one or more apply to 2 LHDs)

-Accurately track LCR initial tap monitoring and correctly assign systems to reduced monitoring frequency. For systems required to take 10 or more samples, after initial monitoring, decrease the number of required samples by one half. Do not issue systems LCR tap M/R violations after an action level exceedance. Initiate follow-up to LCR action levels more quickly. Require systems

conducting treatment studies to sample all drinking water taps by the end of the next 6-month CP, and report the results from treatment studies every 6 months with documentation that fixtures with results exceeding an action level were removed or replaced and subsequent results were below the action levels.

Other Recommendations Include: (one or more apply to 2 LHDs)

- Re-enter a nitrate and total coliform bacteria MCL violation deleted from SDWIS/FED after the EV. Do not enter a SOX date for a nitrate M/R violation that precedes the date the system sampled. Only link a state administrative penalty (SFM) to the violation(s) that it was issued for.

1.0 INTRODUCTION

During the week of May 30, 2006, Tom Murphy of Region 5 of the United States Environmental Protection Agency (U.S. EPA) conducted an enforcement verification (EV) audit of the Upper Peninsula (UP) District Office of the Michigan Department of Environmental Quality (MDEQ) Bureau of Water, drinking water program. Mr. Murphy reviewed community water systems (CWS) overseen by the Water Bureau's Upper Peninsula District Office, and noncommunity water systems (NCWSs), overseen by the local health departments with oversight by MDEQ's Noncommunity Drinking Water Unit. This report documents the findings of the review.

The purpose of the Enforcement Verification (EV) was to determine if the enforcement process, outlined in the Michigan Compliance Strategy and enforcement flow charts, is being followed; to verify the accuracy and completeness of the enforcement documentation in public water system supervision program (PWSS) files; and to compare the files with the enforcement and associated violation information that the PWSS program reported to the Federal Safe Drinking Water Information System (SDWIS/FED). No UP systems were included in at least the last two EVs performed in 2001 and 1994.

A sample of community water systems (CWSs) and nontransient noncommunity water systems (NTNCWSs) that had violations during the time period of 2003 – 2005, and transient noncommunity water systems (TNCWSs) that had violations during 2004 and 2005 were reviewed.

CWS violations reviewed were for the Total Coliform Rule, and Surface Water Treatment Rule. NCWSs were selected for each of the UP local health departments. NTNCWS violations reviewed were for the: Total Coliform Rule, Phase II/V Rule including nitrate, nitrite, inorganic contaminants (IOCs), volatile organic contaminants (VOCs) and synthetic organic contaminants (SOCs), and Lead and Copper Rule. TNCWS violations reviewed were for the Total Coliform Rule and Phase II/V Rule (nitrate/nitrite).

A list of NCWSs to be reviewed for the EV was sent to MDEQ before the EV to allow the Local Health Department (LHDs) 3-4 weeks to copy the necessary information in the files and send to the UP District Office. The following information was requested:

- · The most recent sanitary survey;
- Monitoring results for the period of the review if not in WaterTrack;
- · Sample site information if not in WaterTrack.
- . Monitoring/reporting and MCL violation notices;
- Public notice (PN) received from the system in response to the applicable violation; and,
- Documentation of MDEQ/LHD violation follow-up and communication with the water system regarding the violation.

MDEQ granted Region 5 (R5) access to its NCWS program WaterTrack database prior to the EV, and R5 personnel printed sample results, basic facility information, and monitoring schedules from WaterTrack for these systems and brought the print-outs to the EV.

Specifically, the team reviewed a total of 27 system files, consisting of 7 CWSs (5 municipal and 2 privately owned systems, including a privately owned nursing home), 6 NTNCWSs, and 14 TNCWSs. In these files, the audit team reviewed the enforcement follow-up and public notice (PN) records for the following numbers and types of contaminant violations: 7 TCR maximum contaminant level (MCL), 1 SWTR Treatment Technique (TT), 3 TCR monitoring and reporting (M/R), and 1 state Nitrate M/R at CWSs; and 10 TCR monthly MCL (includes 2 unreported violation); 2 TCR acute MCL; 1 Nitrate MCL, 19 TCR M/R, 9 Nitrate M/R, 1 Nitrite M/R, 5 LCR M/R, 2 inorganic contaminant, 2 volatile organic, and 2 synthetic organic contaminant M/R violations at NCWSs. Tracking and enforcement of Lead and Copper Rule corrosion control treatment steps following action level exceedances at NCWSs were reviewed for 2 lead action level exceedances and 1 copper action level exceedance.

2.0 STATE FILES

<u>System Files</u>. The MDEQ UP District Office and LHDs maintain hard copy files of analytical results, inventory, enforcement correspondence, SWTR evaluations, site sampling plans, and PN.

The UP District Office provided files, which were organized in date order, and easy to locate. WaterTrack proved to be a fairly comprehensive representation of information from the LHDs' jurisdiction over the noncommunity systems.

Almost all of the chemical samples from the UP are analyzed by the MDEQ State laboratory in Lansing. That laboratory also analyzes about half of the LCR and TCR samples. The other half of the samples are analyzed by smaller commercial laboratories. Some larger communities and some LHDs have their own laboratories.

The State laboratory sends hard copy analytical results, usually as PDF files, to the District Office for CWSs and to the LHDs for NCWSs. The results are printed out and manually entered into SDWIS/State by the District Office and into WaterTrack by the LHDs. CWS TCR results are first entered into a database that the UP District Office uses to track TCR compliance. Analytical results from a few commercial laboratories are also manually entered into WaterTrack. The State laboratory and commercial laboratory data may be delivered electronically in the future. Commercial laboratories provide the results to their client systems, which then send hard copies to the district offices or LHDs.

Data Storage and Compliance Determination. The MDEQ UP District Office also uses SDWIS/State and the LHDs use WaterTrack. The UP District Offices retains hard copies of analytical results for all rules for CWSs. After the EV, UP District Office CWS program staff advised R5 that the hard copy TCR results are kept for 2 years. Some data are also entered into SDWIS/State. The LHDs in each county retain hard copy files and also enter all data into WaterTrack, their common database, overseen by the MDEQ Central Office in Lansing.

The laboratories are required to notify systems of a positive total coliform sample in a timely manner. Michigan state law places the burden of action on the system and requires the system to

inform their district office, or LHD when the system has a total coliform positive sample. If fecal coliform or *E. coli* is present, the State laboratory must call the district office, following a prescribed phone tree. The U.S. EPA laboratory certification manual requires any private laboratory certified by U.S. EPA or the State to notify the system of a total coliform positive sample within 24 hours.

Phase II/V compliance is determined through SDWIS/State or WaterTrack, after data have been entered. Also, district office personnel may use Excel or other Access tables to allow them to track compliance and violations. District offices are manually generating violation letters, rather than using SDWIS/State.

<u>SDWIS/Fed Submittals</u>. The State reports system-specific data to SDWIS/FED. Current actions and inventory are updated quarterly using the total replace method. Lead sample values are reported less frequently. MDEQ uploads to SDWIS/FED via data transfer files to the central data exchange from SDWIS/State for CWSs and from WaterTrack for NCWSs.

3.0 ENFORCEMENT VERIFICATION PROCESS

3.1 Community Water Systems

CWSs in the UP are overseen by the UP District Office.

The MDEQ Community Drinking Water Unit (CDWU) of the Lansing Operations Division provides program support to district staff and the regulated community, and coordinates federal reporting from the district offices.

The EV audit team checked for adherence to the:

- MDEQ CWS flow charts for monitoring and reporting violations, total coliform-positives, violations of state drinking water standards, Phase II/V exceedances of the MCL for inorganics & organics (other than TTHM), and enforcement (Appendix A);
- National Primary Drinking Water Standards at 40 CFR Part 141; and
- MDEQ's drinking water program policy and procedures for administrative fines including the Administrative Fines Policy Summary EQC 2098 (11/2001).

TCR MCL Violation Follow-Up

For MCL violations at CWSs, the audit team specifically checked for timely issuance of informal Notice of Violation (NOV) letters which require systems to issue PNs and/or boil water notices, provide an example notice with appropriate health effects information for the systems to use, and require systems to return a signed/dated copy of the notices they issue. The audit team checked the file for signed copies of PNs and/or boil water notices returned from the systems. The audit team checked for documentation of an investigation into the cause of the violation, any corrective actions taken, disinfection or boosting disinfectant levels, and satisfactory consecutive negative

check samples before the system was returned to compliance. The audit team also checked for documentation that the State notified the system it had returned to compliance and should lift the PN/boil water notice, and collect 5 routine samples the next month. The audit team also looked for: a return to compliance (SOX) date in SDWIS for the violation, and laboratory results for 5 routine samples the next month. The EV team also checked if systems that had a positive routine sample were instructed to collect repeat samples.

During the EV, MDEQ CWS program staff explained that the district engineers call system operators the same day the laboratory calls the MDEQ UP District Office with positive TCR results, to instruct them to take repeat samples, or instruct systems that call in positive results to take repeat samples. The district engineer instructs systems that have an MCL violation to begin feeding chlorine, if it doesn't normally disinfect, or boost dosage if it normally disinfects. Systems that normally disinfect are typically told to boost chlorination for two weeks. Systems that do not normally disinfect are told to chlorinate for 1 or 2 weeks. Systems that normally disinfect may be instructed to flush to get the increased dosage into the system, and then wait a couple of days to let it dissipate before taking check samples. It appears that MDEQ instructs systems that do not normally disinfect to flush mains to distribute the chlorine residual throughout the system, and continue flushing and sampling to ensure that disinfectant is present throughout the system.

During the EV, MDEQ staff indicated that there is no set policy for the number of consecutive ND TCR samples (and how many hours between samples) that must be obtained to check the success of disinfection for systems that do not normally disinfect, or systems that boost disinfection. The UP District Office uses the date of these non-detect (ND) samples for the SOX code it links to MCL violations in SDWIS/FED.

SWTR TT Violation Follow-Up

The EV audit team checked for adherence to MDEQ CWS flow charts for violations of state drinking water standards, and for enforcement. For SWTR TT violations at CWSs, the audit team specifically checked for timely issuance of informal Notice of Violation (NOV) and if those letters required systems to issue PNs, provided an example notice with appropriate health effects information for the systems to use, and required systems to return a signed/dated copy of the notices they issue. The audit team checked the file for signed copies of PNs returned from the systems. The audit team checked for documentation of an investigation into the cause of the violation, and corrective actions taken before the system was returned to compliance. The audit team also checked for documentation that the State notified the system it had returned to compliance and should lift the PN. The audit team also looked for: a return to compliance (SOX) date in SDWIS/FED for the violation.

M/R Violation Follow-Up

For M/R violations at CWSs, the audit team specifically checked for timely issuance of an informal NOV letter and adherence to the states drinking water program policy and procedures for administrative fines. The EV team checked if NOV letters required the system to issue a PN for the violation, provided an example PN for the system to use, and required the system to return a signed/dated copy of the PN. The audit team also checked for adherence to the CWS program's Monitoring and Reporting Violation Flowchart revised 3/7/2002 which shows issuance of an informal NOV for initial M/R or PN violations which sets a new deadline to monitor or report by, directs the system to issue PN, and issues a fine (the fine is waived if this is the 1st violation in 12 months of an event scheduled more frequently than once per year). NOV letters or other written notification should warn systems of \$200 fines for second M/R violation for the same contaminant within a 12-month period; or assess \$200 fines after systems have a second violation within a 12-month period, and \$400 fines after systems have a third and any additional violations. For annual and less frequent monitoring, the EV team looked for a reminder/fine warning notice sent approximately 30 days before the end of the compliance period (CP), and a NOV/fine letter. More information on fines is provided on the Administrative Fines Policy Summary - EQC 2098 (11/2001). If repeated M/R violations occur, formal enforcement is initiated per the Enforcement Flowchart updated 3/2002.

3.2 Noncommunity Water Systems (NCWSs)

NCWSs are overseen by the local health departments (LHD) through contracts with MDEQ, with oversight by MDEQ's Noncommunity Drinking Water Unit of the Lansing Operations Division. Noncommunity water systems in each of the Upper Peninsula 6 local health departments (listed below) were included in the review: Luce-Mackinac-Alger-Schoolcraft (LMAS) District Health Department (DHD), Western U.P. District Health Department, Delta - Menominee DHD, Dickinson-Iron DHD, Chippewa Count Health Department (CHD), and Marquette CHD.

The EV audit team checked for adherence to:

- MDEQ NCWS flow charts for timely and appropriate (T & A) actions for monitoring violations, bacteriological MCL determination/response to positives, and T & A actions for MCL violations (Appendix A);
- the National Primary Drinking Water Standards at 40 CFR Part 141;
- the states drinking water program policy and procedures for administrative fines for M/R violations and violations of state drinking water standards; and
- the "Civil Fines For Failure to Monitor' flow chart sent to LHD Environmental Health Directors in July 1997

TCR MCL Violation Follow-Up

The audit team checked for adherence to the procedures for responding to positive bacteriological sample results outlined in the August, 1991 (second edition) Noncommunity Public Water Supply Manual (NC PWS Manual).

For TCR MCL violations at NCWSs, the EV team specifically checked for timely issuance of informal NOV letters that instruct systems to notify customers about the violations, attach a sample PN, and require the system to return a signed/dated copy of its PN; provide an alternative source of water; investigate to determine the cause and take corrective actions; chlorinate the well after repairs are completed; and re-sample until a minimum of 2 consecutive negative total coliform samples are taken at least 8 hours apart. The EV team also looked for documentation that systems were instructed to collect repeat samples after they had a positive routine sample. The audit team, additionally, checked if one or more of the 4 repeat samples following a positive routine sample were taken from the raw water sample tap.

The Noncommunity Public Water Supply Manual does not specify where check samples should be collected. The NCWS program requires systems that have an MCL violation to collect check samples after they disinfect the system. A minimum of 2 consecutive negative check samples taken at least 8 hours apart are required. The "NCWS Response to Positives" flow chart does not provide any information on check sampling or other follow-up steps for MCL violations, other than PN requirements. The MDEQ Noncommunity Unit has previously advised that one check sample should be taken from a distribution tap and the other from the raw water sample tap.

The audit team also checked for documentation that the LHD notified the system it returned to compliance, should discontinue posting PN, and providing bottled water, and collect 5 routine samples the next month. The audit team also checked the files for: a signed copy of the PN received from the system and documentation of an investigation into the cause of the problem. The audit team also checked if a return to compliance (SOX) code and date were entered into SDWIS/FED for the violation, and if the system collected 5 routine samples the following month.

The MDEQ Noncommunity Unit has also previously provided the following additional information on LHD follow-up procedures. LHDs generally will phone systems with a history of TCR problems after a positive routine sample to instruct them on repeat sampling and proper chlorination procedures, and will send them a sample PN to post in case of an MCL violation. LHDs may also send systems that use private labs a reminder letter to get repeat samples after a positive routine result is received. For systems that do not have a history of problems, LHDs generally wait until they collect repeat samples, and call or visit systems that get an MCL violation to provide instruction and assistance with investigation of the problem, elimination of defects, and chlorination. It is important that the systems disinfect and flush the well properly, and only take check samples when there is no detectible chlorine residual. The LHD leaves test kits ("pillows") for testing chlorine residual, and instruct the operators on their use. The LHD

may return to take its own check samples. If the LHD's samples are positive, but the system's samples were negative, the LHD will invalidate the system's samples. Systems often do not perform the above steps correctly, so it is fairly common for systems to get positives when they take 5 routine samples the next month.

The MDEQ Noncommunity Unit had recently advised Region 5 that it had been finding the reason some NCWSs have repeat MCL violations is that MDEQ's follow-up procedures for TCR MCL violations were not being properly followed. This includes not taking enough repeat samples; taking check samples before chlorine residual is completely flushed from the system; seasonal systems closing after taking a positive sample or before an MCL violation is resolved, and not fixing the problem before re-opening; and LHDs inappropriately waiving the requirement to take 5 routine samples the next month.

The audit team also checked if systems that monitor annually were placed on quarterly monitoring after they had an MCL or M/R violation. MDEQ's Noncommunity Unit issued instructions to the LHDs for assigning total coliform monitoring frequencies and documenting monitoring reductions in a September 9, 1999 memo.

Nitrate MCL Violation Follow-Up

For nitrate MCL violations at NCWSs, the EV team specifically checked for adherence to the NCWS program's T & A (timely and appropriate) actions for MCL violations flow chart, and procedures for responding to nitrate MCL violations outlined in the NC PWS Manual. The NC PWS Manual requires that whenever an initial nitrate sample result exceeds 10 mg/l, a nitrate confirmation sample must be collected from the same location as the original sample. If the average of the two samples exceeds 10.0 milligram per liter (mg/l), the MCL for nitrate has been exceeded, and the facility must institute precautionary measures and begin seeking a new source. These measures include the provision of water from an approved, alternate source (for infants and those who request it) and posting at water outlets. The NC PWS Manual requires the confirmation sample be taken within 48 hours of the system receiving notification of a result exceeding 10 mg/l of nitrate. However, this is less stringent than 40 CFR 141.23(f)(2) which requires the confirmation sample to be collected within 24 hours. MDEQ's monitoring guidebook for NTNCWSs issued in July 1993 requires re-sampling within 24 hours of notification of initial results exceeding the MCL, and using the average of the two results to compute compliance with the MCL.

M/R Violation Follow-Up

The Noncommunity Unit staff has advised that the February 1993 flow chart entitled MDPH (now MDEQ/Bureau of Water) Monitoring Violations - Noncommunity Flow Chart Showing "Timely and Appropriate" Actions incorrectly shows that formal enforcement is initiated after a single chemical/radiological monitoring violation instead of after a system becomes a chemical/radiological monitoring significant noncompliers (SNC) (i.e., fails to monitor for a

chemical/radiological contaminant for 2 consecutive compliance periods). The flow chart also needs to be amended to show issuance of an informal NOV for the first chemical/radiological M/R violation.

For M/R violations at NCWSs, the audit team checked for timely issuance of an informal NOV. The EV team checked if NOVs letters required the system to issue a PN for the violation, provided an example PN for the system to use, and required the system to return a signed/dated copy of the PN.

The audit team also checked for adherence to the states policy and procedures for administrative fines (except for Dickinson-Iron DHD which had not adopted the state administrative fines policy and procedures prior to the beginning of the EV review period). LHD adherence to the Civil Fines For Failure to Monitor flow chart (see Appendix A) sent to LHD Environmental Health Directors in July 1997 was also checked. Under the fine policy, failure to collect all samples and report results from sampling events scheduled more frequently than once per year (i.e., TCR quarterly routine samples, repeat samples, and five routine samples the month following a positive sample) constitutes a monitoring violation. The first monitoring violation during a 12-month period should be followed by a written warning (NOV letter, etc.) that the system will be fined \$200 if it incurs a second violation within a 12 month period. If the system incurs a second monitoring violation during this time frame, it should be assessed a \$200 fine. If the system has additional monitoring violations within the 12-month period, it should be assessed a \$400 fine for each.

The NCWS program modified the above policy and procedures slightly by including LCR 6-month initial tap monitoring violations with annual and less frequently scheduled monitoring as reflected on the Civil Fines For Failure to Monitor flow chart. For violations for the less frequently scheduled monitoring, the EV team checked for reminder/fine warning notices sent 30-90 days before the end of the CP. The EV team also checked for issuance of NOVs with \$200 fines for these types of monitoring violations that set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warn them that a \$400 fine will be assessed for failure to sample by this date, and issuance of NOVs with \$400 fines for failure to sample by the new date.

The EV team also looked for formal enforcement against any M/R SNC.

For Dickinson-Iron DHD which did not adopt MDEQ's administrative fines policy and procedures until after the EV period of review, the audit team checked for issuance of an informal NOV letter, and initiation of formal enforcement after the system became an M/R SNC.

Lead and Copper Action Level Exceedance Follow-Up

For lead and copper action level exceedances at NTNCWSs, the audit team checked for conformance to procedures for follow-up monitoring, public education (PE) (for lead

exceedances), and corrosion control treatment requirements in Michigan's approved LCR primacy package. The audit team checked for adherence to Section 1, Part 2 ("Summary of Requirement When "Action Level" is Exceeded for Lead/Copper") of the "Drinking Water Monitoring for Nontransient Noncommunity Systems" booklet sent to NTNCWSs on August 1, 1993, that includes the "Lead/Copper Rules Nontransient Systems Serving <3,301" flow chart (Appendix A). The audit team checked for documentation that the system was properly instructed to deliver PE (and provided a sample PE notice containing all the mandatory language for its use), returned a signed copy of the PE notice it delivered, performed source water lead and copper monitoring, selected a treatment option and submitted an implementation proposal. Michigan allows NTNCWSs to conduct a treatment study to provide more time to select an appropriate treatment process to install, and proceed to reduce lead levels through a lead/copper source identification and removal program. The audit team checked if systems choosing this option tested all drinking water taps for lead/copper before the end of the next 6month CP, replaced all taps where the lead action level was exceeded, and retested at these locations as required by MDEQ. The audit team also checked if retest results were below the action levels. Michigan also allows NTNCWSs to postpone WQP monitoring during the initial treatment study. However, if it is determined that lead and copper source identification and removal efforts will not eliminate the elevated lead or copper levels in the system, the water system has to pursue the corrosion control treatment option which includes WQP sampling.

MDEQ and LHDs encourage systems to use voluntary flushing (or removal from service) to reduce lead/copper at taps with elevated levels while fixture repair/replacement or additional studies are underway.

3.3 Verification of Enforcement Violation Data In SDWIS/FED

The audit team compared the enforcement and associated violation information in the files with the information reported to SDWIS/FED. Specifically, the team checked whether or not: the violations in the file matched SDWIS/FED, there were records in the file for the enforcement actions in SDWIS/FED, and the appropriate violations were correctly linked with each enforcement action. For violations found in the files that were not reported to SDWIS/FED, the audit team noted any documentation that the State/LHD was aware of the violation and enforcement follow-up was taken. There may be additional unreported violations during the review period that were not noted by the audit team.

4.0 ENFORCEMENT VERIFICATION FINDINGS

4.1 Community Water Systems

Enforcement procedures were followed for 10 of 12 CWS violations: 4 of the TCR MCL, the SWTR TT, and all the M/R violations. Procedures were not followed at one CWS for 2 TCR MCL violations which had not been reported to SDWIS/FED and were reported late after the EV.

4.1.1 TCR MCL Violation Follow-Up

The audit team reviewed enforcement follow-up for 5 TCR MCL violations at 4 municipal systems. The audit team found that procedures were generally followed for 4 of the violations, but for the April 2005 TCR MCL violation at Iron Mountain there was no documentation that the system boosted disinfection and collected consecutive non-detect (ND) check samples. The audit team also reviewed follow-up for 2 additional TCR monthly MCL violations at one of these municipal systems that had not been reported to SDWIS/FED and were reported late after the EV. The audit team found that procedures were not followed for these violations because there were no check sample results or other documentation that the system disinfected the water system and collected a set of ND check following the violations.

Collecting repeat samples within 24 hours of notification of positive routine sample(s)

Repeat samples were taken very quickly following positive routine samples in all 7 cases reviewed and in some cases were taken 1-2 days after positive routine samples.

However, it appears that Iron River Township-Beechwood only collected 3 of the 4 required repeat samples on 11/23/04 following a 11/22/04 TC positive (TC+) routine sample, and should have been issued an NOV for a minor repeat M/R violation. The 11/29/04 NOV letter for the November 2004 MCL violation states the 11/22/04 TC+ routine and 1 of 4 repeat samples were TC+. However, only 3 results for repeat samples taken on 11/23 (1 TC+ and 2 ND) were on the database printout (one of these is apparently incorrectly identified as a routine sample).

UP District Office staff advised us during the EV that Kinross Township took repeat samples from hydrants instead of distribution system taps as required because the system was trying to show that the TC+s were related to the construction of the new water main. The August 2003 monthly TCR MCL violation was restricted to the "corner" of the water system where a new portion of the new water main was put on line. Region 5 does not recommend taking total coliform bacteria samples at hydrants because bacteria builds up in the stagnant water above the valve.

MDEQ advised the EV team during the EV that Iron River Township sometimes does not call MDEQ as long as 7 days after receiving a TC+ routine sample result by which time it may have already taken a set of repeat samples for one, but not all, the TC+ routine samples as required.

Neither 40 CFR Section 141.31(a) or MI Rule 10707b and 10734(1), requires a system to notify the state of one or more total coliform positive sample results which do not constitute a total coliform bacteria MCL violation, until the 10th day of the month following the month in which the results were received, or within 10 days following the end of the required monitoring period, whichever is sooner. The only "requirements" regarding this are in EPA's laboratory certification manual and apply to private laboratory certified by EPA or the State, but not to State laboratories.

Timely issuance of written NOV for TCR MCL violations

The UP District Office issued timely NOVs for all 5 of the TCR MCL violations reviewed. Timely NOVs were also issued for the 2 TCR monthly MCL violations that had not been reported to SDWIS/FED and were reported late after the EV.

Report all TCR MCL violations into SDWIS/FED

Iron River Township-Beechwood's November 2004 and December 2004 MCL violations were reported to SDWIS/FED late, after the EV.

Investigate, Correct, Disinfect, Flush out residual, and Collect 2 consecutive ND "Check" Samples, and Notify System of RTC

For all the violations, there was generally no documentation in the files of MDEQ's instructions to the systems regarding conducting an investigation, disinfecting the system, and collecting check samples except for language included in the sample PNs MDEQ sent with the NOV letters. There was also no documentation in these files of MDEQ notifying the systems that the MCL violations had been resolved.

Based on the lack of check sample results or other documentation, it appears that Iron Mountain may not have boosted disinfection and collected a set of consecutive ND check samples following the April 2005 TCR MCL violation, and Iron River Township-Beechwood may not have disinfected and obtained a set of ND check samples following the November 2004 and December 2004 MCL violations.

MDEQ advised us that Iron River Township does not always fax them the results of check samples it takes to check the success of disinfection. A couple of years ago, MDEQ asked the lab the system uses, Western Iron County Wastewater TP Laboratory, to fax results to MDEQ but they declined. Approximately 10 years ago, this lab used to call MDEQ with positive results.

During the EV, MDEQ informed the EV team that Kinross Township does not normally chlorinate. It began chlorinating in response to the August 2003 MCL violation, and discontinued disinfection treatment in mid-2004. However, this system's samples continued to be shown as "Treated Public Distribution" samples through April 2006 on the UP District Office's TCR compliance database printout. This could result in MDEQ providing incorrect instructions and example PNs to the system to respond to TCR MCL violations.

During the EV, MDEQ CWS program staff advised there was no set written policy on the number, location, and timing for the consecutive ND TCR "check" samples that must be taken in order to check the success of disinfection following an MCL violation. There is also no set policy on checking disinfectant residual levels before collecting the samples to ensure residual levels have returned to normal operating levels. After the EV, MDEQ staff confirmed the lack

of a set policy for "check" samples, but advised that CDWU instructs District Offices that inquire that 2 sets of ND check samples must be collected after disinfectant levels have returned to normal operating levels. CDWU staff also advised us that a draft boil water policy which is working its way through middle management review and sign-off requires 2 sets of 5 ND samples (with increases/decreases based on system size) taken 24 hours apart. It encourages systems to collect these from routine sample sites in their sampling site plan unless they cannot or MDEQ instructs them otherwise. However, it would not require that chlorine residual levels be checked before these samples are taken to check the success of disinfection and clear the MCL violation, or that these samples be taken after levels have returned to normal operating levels. CDWU staff also stated that the draft policy reflects the current approach for monthly TCR MCL violations.

It appears that MDEQ does not instruct systems that do not normally disinfect to flush all disinfectant residual from the system before collecting samples to check the success of disinfection. DEQ should instruct these systems as such and should not count samples taken to check the success of disinfection following an MCL violation at systems that do not normally disinfect if disinfectant residual is present in the samples.

UP District Office staff also advised during the EV it is their understanding from MDEQ CWDU when CWS take the 5 routine samples required the month following a positive sample or MCL violation, have an (another) MCL violation based on the first and second samples, the remaining routine samples taken after chlorination begins can be counted to clear the MCL violation even though there is still chlorine in the system. The UP District Office uses the date of these ND samples for the SOX code it links to the MCL violation in SDWIS/FED. After the EV, CDWU staff advised the UP District Office is apparently confusing special purpose sampling to check the success of disinfection following an MCL violation with routine sampling which is suspended when an MCL violation occurs until it is resolved. CDWU staff concurred that the "check" samples used to clear the MCL violation should not be taken until chlorine residual is absent from the system for systems that do not normally chlorinate.

PN for MCL Violations

A copy of a signed and dated PN from the system was not in the UP District Office files for 5 of the 7 CWS TCR MCL violations reviewed. This included the August 2003 monthly violation at Kinross Township, October 2005 monthly violation [a 11/15/05 state PN received (SIF) date is linked to the violation in SDWIS/FED], November 2004 and December 2004 monthly violations at Iron River Township-Beechwood, and the April 2005 violation at Iron Mountain (newspaper PN is in file, but copy of PN delivered to each customer is not). If a system does not provide PN for an MCL violation, it should be fined under the administrative fines policy and procedures for violation of state drinking water standards \$1,000 per day up to the maximum amount of fine per violation of \$2,000 (for water systems that serve 10,000 or fewer people). These systems did not receive fines.

The example PNs sent with NOVs for monthly TCR MCL violations state that customers will be notified when the system's sampling shows that no bacteria are present. However, during the EV, MDEQ staff informed the audit team that systems do not need to send another notice to their customers, except to rescind boil water notices for acute MCL violations. After the EV, MDEQ CDWU staff confirmed there is usually no need for systems to issue follow-up notice for monthly MCL violations because they are allowed 30 days after learning of the violation to issue the PN by this time they have already completed the investigation into the possible cause, taken corrective actions, and conducted the follow-up sampling. On the other hand, systems that have an acute MCL violation must comply with Tier 1 PN requirements which require that PN be provided within 24 hours after learning of the violation, which is usually before the investigation, corrective actions, and follow-up sampling had been conducted. MDEQ staff advised that it notifies systems issued boil water notices because of acute TCR MCL violations or pressure loss not to lift the notices until they receive authorization from MDEQ, and advises them to notify their customers when the boil notice is lifted.

After MDEQ received a copy of Iron Mountain's April 2005 TCR MCL violation PN on 11/28/05 it notified the system that their PN notice was not legible and as a result does not comply with the requirement of the federal standards. It warns that if a legible notice is not provided within 30 days, a ruling will be requested from EPA. A response letter was received on 11/30/05 which says the system checked the approximately 250 post cards that were not yet mailed and found 4 that were somewhat illegible, and that it estimated there may been 50 cards in this condition. It says so far they received approximately 6 phone calls and they offered callers a full size copy of the PN.

MDEQ's CWS program's Monitoring and Reporting Violation Flowchart revised 3/7/2002 states for more information on fines, see the Administrative Fines Policy Summary (EQ Form 2098 11/2001). However, the November 2001 summary does not specifically indicate that failure to PN for an MCL violation is subject to the fine amounts for negligent minimum fines. After the EV, Region 5 accessed the March 2005 revised version of the Administrative Fines Policy Summary on MDEQ's website which does indicate this.

Enforcement Data in SDWIS/FED

For the Iron River Township-Beechwood system:

The November 2004 and December 2004 monthly MCL violations were reported to SDWIS/FED late, after the EV.

It also appears that a sanitary survey violation for 7/1/95-6/30/1999 (before the EV review period) should have been reported to SDWIS/FED. (MDEQ entered a sanitary survey violation for 1/1/91-6/30/94 for this system.)

Bessemer's October 2005 TCR major routine M/R violation should have been entered into as a minor M/R (type 24) violation since the system collected 4 of the 5 required samples.

MDEQ entered an 11/15/05 state PN received State PN receive (SIF) date for Iron River Township-Beechwood October 2005 MCL violation in SDWIS/FED, but a copy of a PN signed and dated by the system is not in the file.

It appears that the 11/2/03 state return to compliance (SOX) date linked to Sherman Township's October 2003 SWTR TT violation was at least 3 months premature because the spreadsheet provided by MDEQ staff during the EV indicates the new well was to go online on 2/10/04.

<u>UP District Office CWS TCR Compliance Database</u>

Iron River Township-Beechwood's 11/22/04 TC+ result was not on the TCR compliance database printout, and only 3 results for repeat samples taken on 11/23/04 (1 TC+ and 2 ND) were on the printout. One of these is apparently incorrectly identified as a routine sample.

A 12/22/04 "Contaminated Water Sample" letter was in the Iron River Township-Beechwood file for a 12/15/04 TC+ and I of 4 repeat samples taken over the weekend which was also TC+ which requires the system to take a minimum of 5 routine samples during January 2005. The results of remeat samples taken over the weekend were not on the database printout, and MDEQ staff could not locate the hard copy results for them during the EV.

In the draft CWS EV findings chart R5 commented that, based on a review of the sample report date. Iron River Township-Beechwood and discussion with MDEQ staff, no repeats taken following the 10/14/04 TC+ routine sample at Iron River Township-Beechwood, and 5 routine samples were not taken in November 2004 (and a major repeat M/R 2004 and a major routine M/R violation for November 2004 should have been emercial. WIS/FED). R5 also commented there was no documentation in the file that MDEQ instructed the system to collect repeat samples for the 10/14/04 TC+, or to take 5 routine samples durin. November 2004, or sent an NOV for these violations. UP District Office responded "We clieve this 10/14/04 POS entry in the database is an error. We have no record of correspondence related to this POS, however those bacti hardcopies are gone (we keep 2 years worth here in office)."

R5 also commented that Iron River Township-Beechwood's October 2005 monthly MCL violation was caused by 2 TC+ 10/29/05 samples rather than a positive October 2005 routine sample and 1 of the 4 positive repeat samples as stated in the example PN sent with the 11/4/05 NOV. MDEQ staff checked the hard copy results for these and the 2 other samples taken on 10/29/05 and all 4 were marked as repeat samples. After the EV, UP District Office staff advised "There was an error in the bacti database entry-the 10/27/05 bacti sample was POS (not ND as entered in the database) therefore the 4 samples on 10/29/05 were the repeats. MCL occurred as 2 of the 4 repeats 10/29/05 were POS...."

The Sample Report database printouts provided to the EV team do not provide information on sample collection time.

4.1.2 M/R Violation Follow-Up

The audit team reviewed follow-up for 3 TCR M/R violations, and one state nitrate M/R violation that did not need to be reported to SDWIS/FED.

The audit team found that U.P. District Office generally followed its procedures for all of these violations.

The UP District Office did not follow procedures for 1 unreported minor repeat M/R violation. It appears that Iron River Township-Beechwood should have been issued an NOV for a minor repeat M/R violation for only collecting 3 of the 4 required repeat samples on 11/23/04 following an 11/22/04 TC+ routine sample. The 11/29/04 NOV letter for the November 2004 MCL violation states the 11/22/04 TC+ routine and 1 of 4 repeat samples were TC+. However, only 3 results for repeat samples taken on 11/23 (1 TC+ and 2 ND) were on the database printout (one of these is apparently incorrectly identified as a routine sample).

Timely issuance of written NOV for M/R violations

The UP District Office issued timely NOVs for the 3 federal TCR M/R violations reported to SDWIS/FED. The UP District Office also issued a timely NOV for the 1 M/R violation reviewed where the system failed to sample by the state's deadline for annual nitrate sampling, but did not have a federal M/R violation because it sampled before the end of the year.

Fines for M/R Violations

MDEQ did not issue Covington Rest Home an administrative fine for the systems failure collect its 2005 annual nitrate sample by 9/30/05, the state's monitoring deadline. MDEQ CWS program staff advised us that the fine was not issued because MDEQ had not sent the system a monitoring reminder post card, which are normally sent 30 days before the end of the state CP to systems that they have not submitted results. (This violation was not entered into SDWIS/FED per MDEQ's policy of not entering violations of state monitoring requirements into SDWIS/FED if the system samples before the end of the federal CP.)

The 11/4/05 NOV issued for Bessemer's October 2005 TCR M/R violation should have warned the system it would be issued a \$200 fine if it had another TCR M/R violation within a 12-month period.

The NOV letter issued for Hermansville Housing Community's December 2005 TCR M/R violation warns that any additional M/R violations are subject to fines of increasing amounts. To be consistent with MDEQ's policy and procedures for administrative fines for M/R violations which says "Administrative fine determinations for violations in one contaminant group (Table 1) do not impact the amount of the administrative fines for violations in another group," in this case, only additional TCR M/R violations can be subject to increased fines.

Tracking PN for M/R Violations

The NOV letters for M/R violations require system to issue PN not later than 1 year after learning of the violation. It encloses a sample PN, and directs the system to send MDEQ a signed and dated copy within 10 days of posting. A copy of the PN signed and dated by the system was in the files for 2 of the 3 TCR violations reviewed.

The NOV letter issued for Hermansville Housing Community's December 2005 TCR M/R violation directs system to issue PN not later than 1 year after learning of the violation by mail or hand delivery, and any other method calculated to reach other persons regularly served by the system, such as renters etc., and advised the system to consider using its CCR as the vehicle to post the PN (enclose a separate PN within the CCR mailing or hand delivery). It warns the system it will receive a \$200 if it fails to PN.

Enforcement Data in SDWIS/FED

Bessemer's 10/05 TCR major routine M/R violation should have been entered into SDWIS/FED as a minor M/R (type 24) violation since the system collected 4 of the 5 required samples.

4.1.3 SWTR TT Violation Follow-Up

The audit team reviewed enforcement follow-up for 1 SWTR TT violation at Sherman Township. The audit team found that DHD followed its procedures for this violation.

The audit team made the following additional observations:

The 11/21/03 NOV letter requires the system to post enclosed PN no later than 30 days after it learned of the violation, and to send a signed and dated copy of the notice to MDEQ within 10 days after it provides it to its customers. A letter from the system, received 12/18/03, says copies of the enclosed letter are being mailed to our customers by 12/17/03. The enclosed letter says enclosed please find a required letter about your system. (A copy of the PN MDEQ sent the system is attached to the letter.) The system's letter to customers also advises that the current water system is being replaced by a community well already in place and waiting for approval. A spreadsheet which includes monthly average, maximum and minimum filter confluence turbidity readings for this system provided by MDEQ staff during the EV also flags turbidity violations for November 2003, December 2003, and January 2004. It also indicates that the new well was to go online on 2/10/04.

A spreadsheet which includes monthly average, maximum and minimum filter confluence turbidity readings for this system provided by MDEQ staff during the EV indicates that the new well was to go online on 2/10/04.

The November 2003, December 2003, and January 2004 Treatment Technique violations were not reported to SDWIS/FED.

Enforcement Data in SDWIS/FED

Sherman Township

The November 2003, December 2003, and January 2004 SWTR TT violations were not reported to SDWIS/FED. It appears that the 11/2/03 state return to compliance (SOX) date linked to Sherman Township's 10/03 SWTR TT violation was at least 3 months premature because the spreadsheet provided by MDEQ staff during the EV indicates the new well was to go online on 2/10/04.

4.1.4 Commendations and Recommendations

Commendations:

The UP District Office ensures that systems collect repeat samples very quickly following positive routine samples.

The UP District Office issued timely NOVs for all of the 5 reported TCR MCL violations, both of the 2 TCR monthly MCL violations that had not been reported to SDWIS/FED and were reported late after the EV, and all 3 of the TCR M/R violations, and the 1 state nitrate M/R violation reviewed.

The UP District Office instructs systems in NOVs for M/R violations to send back a signed/dated copy of the PN it posts.

The UP District Office generally warns systems that they will receive a \$200 fine if they fail to PN in NOV letters sent for M/R violations.

The UP District Office checks the content of PN notices for monthly TCR MCL violations and requires systems to correct problems.

Major Recommendations:

Discourage systems from taking total coliform bacteria samples from hydrants because bacteria builds up in the stagnant water above the valve.

Take steps to ensure the accurate entry of TCR sample results into the database. The following steps should be considered:

• When positive TCR results are received, make copies and file separately. We recommend you spot check your database against the file monthly at regular intervals.

For example, quality assure 20% of the positive data entries including routine, repeat, and check samples monthly, or 20% quarterly.

• Eliminate manual entry of State laboratory TCR analytical results from hard copies of PDF files by electronically transferring this data to SDWIS/State. Also continue efforts to encourage and assist commercial laboratories to electronically transfer TCR data to SDWIS/State, and consider making this a requirement of MI laboratory certification.

Promptly enter all TCR MCL violations into SDWIS/FED.

Ensure that system files includes written documentation of system disinfection following TCR MCL violations, consecutive ND check samples were collected, and UP District Office notification of the system that the violation was resolved.

Issue guidance for sampling to check the success of disinfection following MCL violations that requires chlorine residual level testing prior to sampling, and prohibits sampling where residual levels have not returned to normal operating levels.

Issue NOVs to systems that fail to submit copies of the results of check samples they take to check the success of disinfection following an MCL violation.

Amend MDEQ's Administrative Fines Policy Summary to allow issuing warnings and/or fines for failure to submit copies of the results of check samples taken to check the success of disinfection following an MCL violation.

Improve tracking receipt of PNs for TCR MCL violations from systems and filing them in system files. If a system does not provide PN for an MCL violation, it can be fined \$1,000 per day up to the maximum amount of fine per violation of \$2,000 (for water systems that serve 10,000 or fewer people) under MDEQ's administrative fines policy and procedures for violation of state drinking water standards.

Revise the Monitoring and Reporting Violation Flowchart so it references the revised Administrative Fines Policy Summary which specifically indicates that failure to PN for an MCL violation is subject to the negligent fine amounts, and ensure they are issued to and used by CWS program staff.

Minor Recommendations:

Drop the wording from the example PNs sent with NOVs for monthly TCR MCL violations which states that customers will be notified when the system's sampling shows that no bacteria are present.

Send systems a sampling reminder and fine warning notice at least 30 days before the end of CP for annual and less frequent monitoring in accordance with MDEQ's policy and procedures for administrative fines for M/R violations.

In TCR M/R NOVs, warn systems they will be issued a \$200 administrative fine if they have another TCR M/R violation within a 12-month period. The fine warning in these NOVs should specifically refer to TCR M/R violation, rather than "any additional M/R violation," because administrative fine determinations for violations in one contaminant group do not impact the amount of the administrative fines for violations in another group under the state fine policy.

Enter accurate return to compliance dates for SWTR TT and TCR MCL violations into SDWIS/FED.

Enter a TCR minor M/R (type 24) violation instead of a TCR major M/R violation (type 23) violation into SDWIS/FED when a system collect some, but not all of its required routine TCR samples.

The sampling time for special purpose samples taken to check the success of disinfection after an MCL violation should be recorded in the UP District Office's TCR compliance database.

The TCR compliance database should be updated as necessary to reflect systems current disinfection treatment status.

See Appendix B for the audit team's findings on how well follow-up procedures were followed for each violation reviewed and SDWIS/FED data discrepancies, and responses received from UP District Office CWS program staff.

4.2 Noncommunity Water Systems

Enforcement procedures were followed for 28 of the 53 NCWS violations: 1 of 2 TCR acute MCL, 6 of 10 TCR monthly MCL, 1 of 1 nitrate MCL, 9 of 19 TCR M/R, 7 of 9 nitrate M/R, 0 of 1 Nitrite M/R, 2 of 4 LCR initial tap M/R, 0 of 1 LCR triennial M/R, 0 of 2 IOC M/R, 1 of 2 VOC M/R, and 1 of 2 SOC M/R violations. Procedures were followed for 2 of 3 lead and copper action level exceedances.

4.2.1 Overview of EV Findings for Local Health Departments

The following table summarizes LHD adherence to follow-up procedures for MCL and M/R violations and lead/copper action level exceedances.

Type of Violation	# of	# Where Follow-	# With	# With Discepancies/# of
	Violations Reviewed	Up Procedures Followed	Discrep- ancies	Violations by LHD
Total MCLs	13	8	5	
TCR acute	2	1	1	Western UP DHD: 1/2
• TCR monthly	10 (2 unreported)	4	6	Delta-Menominee DHD:1/1 Dickinson-Iron CHD: 1/1 Western UP DHD: 1/3 (2 unreported) Chippewa CHD: 1/1 LMAS DHD: 1/1 Marquette CHD: 1/3
• Nitrate	1	1	0	Western UP DHD: 0/1
Total M/Rs	40	15	25	
• TCR	19 (1 unreported)	10	9	Delta-Menominee DHD:4/6 Dickinson-Iron DHD*: 1/5 Western UP: 1/2 Chippewa CHD: 1/1 LMAS DHD: 1/2 Marquette CHD: 1/3
• Nitrate	9	2	7	(1 unreported) Delta-Menominee DHD:2/3 Dickinson-Iron CHD*: 1/2 Western UP: 1/1 Chippewa CHD: 1/1 LMAS DHD: 2/2 Marquette CHD: N/A
• Nitrite	1	0	I.	Delta-Menominee DHD: 1/1
• L/C initial tap	4	2	2	Delta-Menominee DHD: 1/3 Marquette CHD: 1/1
• L/C triennial tap	1	0	1	Chippewa CHD: 1/1

Type of Violation	# of Violations Reviewed	# Where Follow- Up Procedures Followed	# With Discrepancies	# With Discepancies/# of Violations by LHD
• IOC	2	0	2	Delta-Menominee DHD: 1/1 Marquette CHD: 1/1
• VOC	2	1	1	Delta-Menominee DHD:1/1 Dickinson-Iron CHD*: 0/1
• SOC	2	1	1	Delta-Menominee DHD:1/1 Dickinson-Iron CHD*: 0/1
				*Dickinson-Iron DHD had not adopted MDEQ's administrative fines policy and procedures for M/R violations

LCR Action Level Exceedances	# Reviewed	# Where Follow- Up Procedures Followed	# With Discrepancies	# With Discepancies/# of Violations by LHD
• Lead	2	2	0	Delta-Menominee DHD: 0/2
• Copper	1	0	1	Marquette CHD: 1/1

Commendations

The LHDs issued NOVs letters for all the detected TCR MCL violations reviewed, and the 1 nitrate MCL violation reviewed. An NOV letter was not issued for a TCR acute MCL violation that apparently was not initially detected by Western UP DHD, but was later reported to SDWIS/FED.

All of the LHDs issued timely NOVs for all of the M/R violations reviewed except that Dickinson-Iron DHD did not issue an NOV for 1 of the 9 violations reviewed, and Western UP DHD did not issue an NOV for 1 of the 3 violations reviewed.

All the LHDs NOV letters for TCR MCL violations and the 1 nitrate MCL violation reviewed instructed the system to notify customers about the violation, and attach a sample PN. All also allow limited continued use of the water system with PN and precautionary measures (PMs) while the system investigates and resolves the problem. The nitrate MCL violation NOV also instructs the system to begin seeking a new water source. Five of the six LHDs' NOVs provided very thorough instructions regarding the precautionary the system must provide.

All the LHDs NOV letters for M/R violations instruct the system to notify customers about the violation, and enclose a sample PN with the exception of 1 of Delta-Menominee's 16 NOVs which did not require the system to PN and another 1 that did not did not enclose a sample PN.

Marquette CHD increased systems TCR monitoring frequency from semi-annual to quarterly when they fail to collect a semi-annual sample or had positive samples.

Delta-Menominee DHD provided good written and telephone instructions following a routine positive sample regarding repeat sampling and 5 routine samples the next month sampling.

Delta-Menominee DHD also sent written confirmation that the system collected 5 ND routine samples and could return to its normal monitoring schedule. A similar letter to a seasonal campground also notified that it must collect a TCR sample from each of its well systems if any are open during the fourth calendar quarter.

MDEQ and Delta-Menominee DHD are commended for requiring campgrounds with multiple wells to collect TCR samples at each well during each monitoring period which is more stringent than the federal TCR.

Western UP and LMAS DHDs required seasonal systems to collect TCR samples prior to opening for the season.

Western UP DHD provided very good follow-up and file documentation for the 12/04 nitrate MCL violation at Lac La Bell Lodge.

All LHDs except Dickinson-Iron DHD were issuing warnings and fines for M/R violations under MDEQ's administrative fines policy and procedures. After the EV, Dickinson-Iron DHD advised R5 that it will follow the MDEQ's administrative fines policy and procedures.

LHD Follow-Up Action Deficiencies

For NCWSs, there are numerous specific recommendations affecting TCR follow-up. These relate to repeat monitoring instructions, follow-up actions, file documentation, and tracking receipt of PN for TCR MCL violations; monitoring reminder/fine warning notices and fines and requiring proof of PN for M/R violations; LCR monitoring instructions and action level exceedance follow-up, enforcement escalation for M/R SNCs; violation and enforcement action

reporting to SDWIS for various discrepancies noted for all 6 LHDs. There are also recommendations for MDEQ to address program weaknesses noted during the EV some of which contributed to enforcement follow-up and violation reporting discrepancies. Implementing these recommendations would entail LHDs consistently following MDEQ's monitoring and violation follow-up guidance, and MDEQ issuing corrected and more comprehensive guidance for monitoring, violation follow-up, and fines.

For summary findings, R5 commendations and recommendations, and system specific findings see Appendix C for Delta-Menominee DHD, Appendix D for Dickinson-Iron DHD, Appendix E for Western UP DHD, Appendix F for Chippewa CHD, Appendix G for LMAS DHD, and Appendix H for Marquette CHD. The chart included with each of these appendices includes the audit team's findings on how well the LHD adhered to follow-up procedures for each violation and SDWIS/FED data discrepancies, and LHD and MDEQ responses.

4.2.2 TCR MCL Violation Follow-Up

TCR routine samples

Western UP DHD did not instruct Keweenaw Mountain Lodge to stop taking routine TCR samples from well taps and to take them from distribution system taps as required after the system collected a TC+ routine sample on 5/3/04 and an E. coli + routine sample on 6/3/04 from well #1.

Marquette CHD did not instruct Tilden Township Hall to stop taking routine TCR samples from the raw water tap and to take them from distribution system taps as required after the system collected a TC+ routine sample from the raw water tap in November 2004 and October 2005.

Collecting repeat samples within 24 hours of notification of positive routine sample(s)

There was no documentation in the file that Western UP DHD instructed Lac La Bell Lodge to take repeat samples following the 12/20/04 TC+ sample.

Also, it appears that the Western UP DHD may not be instructing systems to collect all repeat samples on the same day as required, because it did not issue minor repeat M/R (type 26) violations to Keweenaw Mountain Lodge and Lac La Bell Lodge after they failed to collect all 4 repeat samples on the same day following positive routines samples at Keweenaw Mountain Lodge in May 2004 and June 2004, and at Lac La Bell Lodge in December 2004.

Delta Menominee DHD did not issue Camp 7 Campground a minor repeat M/R violation for not taking all 4 TCR repeat samples on the same day in May 2005.

Marquette CHD did not issue Tilden Magnetite Partnership a minor repeat violation for not taking all 4 TCR repeat samples on the same day in September 2005.

Marquette CHD did not issue Tilden Township Hall a minor repeat M/R violation after it only took 1 repeat sample following a positive sample in October 2005.

LMAS DHD's repeat sample reminder letters should identify the location and date of the positive routine sample. After the EV, the DHD advised R5 that future letters will identify the TC+ sample location.

Chippewa CHD did not document all reminders to systems to take repeat samples following a positive routine sample(s) in the system files.

Delta Menominee DHD did not include copies of all TCR repeat monitoring reminder letters, and other monitoring reminder letters in the system files. After the EV, the DHD advised that this has been corrected and files will contain them in the future.

Collecting at least one TCR repeat sample at the raw water tap

Dickinson-Iron DHD did not issue Blind Duck Inn a minor repeat M/R violation for failing to take any repeat samples at the raw water sample tap following a positive routine sample.

Timely issuance of written NOV for TCR MCL violations

For the most part, the LHDs issued timely NOVs for TCR MCL violations. Western UP DHD did not issue an NOV letter to Keweenaw Mountain Lodge for the June 2004 TCR acute MCL violation, and the system was not told to provide PN for the violation. The 6/10/04 letter advises system that its June 2003 routine sample taken from the tap of Well # 1 was E. coli + and instructs it to collect 4 repeat samples. However, the letter fails to mention that the sample taken at the motel laundry the same day was TC+, and that the system had an acute MCL violation. The DHD sent a letter acknowledging receipt of 4 ND repeat samples taken on 6/17/04 and 6/22/04 on 10/6/2004. It appears that the DHD was not aware of the positive motel laundry sample, and of the June 2004 acute MCL violation until after this. The violation was entered into SDWIS/FED.

Dickinson-Iron DHD's NOV letters should cite the date of positive routine sample result in addition to the date of the positive repeat sample(s).

The definition of a total coliform bacteria MCL violation in the example PN the LMAS DHD sends with it NOV letters is outdated.

Report all TCR MCL violations into SDWIS/FED

Western UP DHD did not report the TCR MCL violation that occurred in May 2004 at Keweenaw Mountain Lodge's well # 1 system. There is a 5/13/04 NOV letter for this violation

in the file. Western UP DHD also did not report Lac La Bell Lodge's January 2005 monthly TCR MCL violation to SDWIS/FED for which it issued the system an NOV on 1/24/05.

Enter TCR sample data in WaterTrack

Dickinson-Iron, LMAS, and Marquette CHD had not entered some TCR sample results into WaterTrack at the time of the EV. Marquette CHD has still not entered some of the missing results.

<u>Investigate, Correct, Disinfect, Flush out residual, and Collect 2 consecutive ND "Check" Samples, and Notify System of RTC</u>

There was no documentation in Chippewa CHD's files that Daily Bread Restaurant provided the written notification required by the NOV of corrective actions it took or equipment it used to resolve the problem, and that the system has been disinfected and 2 safe water samples obtained.

Marquette CHD did not document that MCL violations were cleared with consecutive ND check samples.

Dickinson-Iron DHD and Western UP DHD cleared MCL violations based on ND check samples taken at the same time at the same tap instead of at least 8 hours apart as required by state procedures.

Western UP DHD's "approval to resume water service" letters does not advise the system that it can discontinue PMs, including PN.

Collect 5 routine samples the month following one or more TC+ samples

Delta-Menominee DHD did not require Camp 7 Campground to collect 5 routine samples in May of 2005 at the Well #4 system after it re-opened for the season following the 8/23/04 positive routine sample. The DHD's 8/27/04 letter told the system it had to collect 4 repeat samples within 24 hours from the well #4 hand pump because of the 8/23/04 TC+ sample. However, an 8/30/04 DHD memo to the file states that the system called to inform DHD that well #4 was taken out of service for the rest of the season and that the well will be tested in the spring. The system did not collect any repeat samples. Because it was closed for winter, the DHD used its reopening procedures, which required two samples 8 hours apart.

Dickinson-Iron DHD did not instruct Blind Duck Inn to collect 5 routine samples the next month following the 9/1/04 TCR monthly MCL violation in the 9/16/04 NOV. It also did not provide written documentation of the site visit it conducted after the violation, the waiver of the requirement to collect 5 routine samples the next month it granted the system, or a copy of the official waiver in the file.

Western UP DHD's 5/14/04 "approval to resume water service" letter to Keweenaw Mountain Lodge after the May 2004 monthly TCR MCL violation requires the system to take 5 "follow-up" samples by 6/15/04 (and credits a 5/12/04 sample the system took towards these 5) instead of during June 2004. The 10/6/04 letter sent following this system's June 2004 TCR acute MCL violation requires the system to take 5 "follow-up" samples by 11/15/04 instead of during October 2004. (The LHD should have previously required the system to take these samples during July 2004.)

Chippewa CHD's written instructions to collect 5 routine samples the month after an MCL violation tells the system as many as 5 samples may be collected at the same time but does not require that they be collected from different drinking water taps. The CHD corrected this language in the subsequent letters reviewed during the EV, and after the EV, the DHD advised us that this was corrected.

Marquette CHD written instructions to a system to collect 5 routine samples the month following an MCL violation states the samples may be collected from the same tap at the same time. However it appears that this system has at least two distribution system sampling sites, and therefore is required to either collect samples at regular time intervals throughout the month, or, because it uses only ground water that is not under the direct influence of surface water, and serves 4,500 persons or fewer people, collect all required samples on a single day if they are taken from different sites. After the EV, the LHD advised R5 that it will address this issue in future correspondence.

Tracking PN for MCL Violations

Delta-Menominee DHD's NOV letters for monthly TCR MCL violations do not instruct the system to send back a sign/dated copy of the PN it posts. After the EV, the DHD advised us that it had corrected this in their form letters.

Western UP DHD did not fine Lac La Bell Lodge for failure to PN for the unreported January 2005 TCR monthly TCR MCL violation even though a copy of the PN signed by system was not in the file.

Marquette CHD NOV letters for monthly TCR MCL violations do not instruct systems to send back a copy of the PN they post. Marquette CHD did not fine Tilden Township Hall for failure to PN for its 10/2005 TCR monthly MCL violation even though a copy of the PN signed by system was not in the file.

Increase TCR Monitoring Frequency Following an MCL Violation

Dickinson-Iron DHD did not place Blind Duck Inn on quarterly monitoring for at least one year following the 9/1/04 MCL violation according to the instructions for assigning total coliform

monitoring frequencies and documenting monitoring reductions issued by the Chief, MDEQ, Water Supply Section, Noncommunity Unit to LHDs on 9/9/99.

4.2.3 Nitrate MCL Violation Follow-Up

Western UP DHD's 12/16/04 letter to Lac La Bell Lodge should have instructed the system to take a nitrate confirmation sample following the 12/14/04 nitrate sample result of 11.6 mg/l within 24 hours instead of 48 hours.

4.2.4 L/C Action Level Exceedance Follow-Up

Marquette CHD did not initiate follow-up to the copper action level exceedance until approximately 4 months after the end of the CP during which it occurred. It only required the system to sample from 20 instead of all drinking water taps by the end of the next 6-month CP as part of its treatment study, and did not require the system to report the results from its treatment study every 6 months including documentation that fixtures with sample results exceeding the lead and/or copper action level were removed or replaced and subsequent results were below the action levels.

4.2.5 M/R Violation Follow-up

Timely issuance of written NOV for M/R violations

Dickinson-Iron DHD did not issue an NOV for 1 of the 9 violations reviewed, and Western UP DHD did not issue an NOV for 1 of the 3 violations reviewed.

LMAS DHD issued M/R violations for the 3rd calendar quarter of 2003 and 2005 to a seasonal system that is closed during this quarter.

LMAS DHD did not always cite the correct duration of TCR M/R violations in NOV letters and fine citations.

Delta-Menominee DHD advised us after the EV that it rescinded several NOVs and a fine because the systems sampled but the laboratory did not forwarded the results. However, the rescissions were not documented in the file.

Report all M/R violations to SDWIS/FED

Marquette CHD did not charge Tilden Township Hall with a TCR minor repeat (type 26) violation for only collecting one repeat sample from the raw water tap on 10/10/05 following the TC+ 10/6/05 routine sample from the raw water tap.

Fines for M/R Violations

Delta-Menominee, Western UP, LMAS DHDs and Marquette CHD did not issue monitoring reminder and \$200 fine warning notices 30-90 days before the end of the CP for annual and less frequently scheduled monitoring, and did not fine systems \$200 for failure to sample by the end of the CP for annual and less frequently scheduled monitoring.

Dickinson-Iron DHD's NOV letters for M/R violations include a warning that failure to comply with the requirements of the MI SDWA may result in the assessment of a \$200 fine imposed and collected directly by the DHD, rather than the State of Michigan. After the EV, the DHD advised it has revised M/R violation procedures to eliminate sample collection by the local health department and will follow MDEQ's policy and procedures for administrative fines for M/R violations.

Delta-Menominee was basing fines for M/R violations on the number of violations during the calendar year instead of during the previous 12-months, as required by MDEQ's policy.

Chippewa CHD was not establishing deadlines in NOVs for M/R violation that precede the end of the monitoring period for annual and less frequent monitoring to minimize federal violations and balance tracking and laboratory work as outlined in MDEQ's policy and procedures for administrative fines for M/R violations.

Chippewa and Marquette CHDs' NOV letters for M/R violations warn the system it will be fined the next time it fails to collect a sample within a 12-month period. This approach does not conform with the state fine policy which states that administrative fine determinations for violations in one contaminant group do not impact the amount of the administrative fines for violations in another group.

LMAS DHD's MCL NOV letters include a warning that the system is subject to a \$200 civil fine if it fails to submit disinfection reports. However, this is not one of types of periodic reports included in MDEQ's policy and procedures for administrative fines for M/R violations.

Enforcement for M/R SNCs

Delta-Menominee, Western UP, and LMAS DHDs did not issue a formal NOV and request for informal hearing after systems became M/R Significant Noncompliers (SNC).

Tracking PN for M/R Violations

Only Marquette CHD's NOV letters for M/R violations instruct systems to send back a copy of the signed/dated PN it posts. Copies of the signed/dated PN sent back from the system were in the files for all 4 of the M/R violations reviewed for Marquette CHD. Copies of signed/dated

PNs returned by the systems were not in the files for any of the M/R violations reviewed for the other 5 LHDs.

L/C Monitoring Frequency

Chippewa and Marquette CHDs did not accurately track L/C initial tap monitoring and correctly assign systems to reduced annual and triennial monitoring. Marquette CHD also did not reduce the number of tap samples required for reduced monitoring to ½ the number that was required for initial tap monitoring.

Marquette CHD issued a system an L/C tap M/R violations after it had a copper action level exceedance. However, systems that exceed an action level are not required to conduct L/C tap monitoring again until after they install corrosion control treatment.

Enforcement Data in SDWIS/FED

Western UP DHD did not report monthly TCR MCL violations at Lac La Bell Lodge in January 2005, and Keweenaw Mountain Lodge in May 2004 to SDWIS/FED. NOV letters issued for these violations on 1/24/05 and 5/13/04, respectively, were in the files.

Western UP DHD reported a value of 10.9 mg/l to SDWIS/FED for Lac La Bell Lodge's December 2004 of nitrate MCL violation, but the average of the 11.6 mg/l 12/14/04 sample and 11.3 mg/l 12/20/04 confirmation sample is 11.5 mg/l.

Western UP DHD deleted Lac La Bell Lodge's December 2004 nitrate and total coliform bacteria MCL violations after the EV.

Western UP DHD enters its informal NOVs for M/R violations into SDWIS/FED as formal NOVs (SFJ). After the EV, MDEQ advised R5 that it contacted Western UP District Health Department 3/23/07 to advise them to use the informal action codes.

LMAS DHD reported an 8/16/05 SOX to SDWIS/FED for Bob-Lo Tavern's 2003 nitrate M/R violation. However, the system did not RTC by collecting a nitrate sample until 4/17/06.

LMAS DHD reported a 4/20/05 SFM (state administrative penalty assessed) to SDWIS/FED for Bob Lo Tavern's 2004 nitrate violation and TCR annual M/R violation, but this \$200 fine was only issued for a 2004 TCR violation. Also, the fine was incorrectly issued for a Q4/04 TCR M/R violation instead of the 2004 annual TCR M/R violation.

Marquette CHD reported Empire Mine's copper action level exceedance to SDWIS/FED for the 2nd half of CY 1999 instead of the 2nd half of 2000.

4.2.6 NCWS Program Weaknesses, LHD's and NonCommunity Unit's Response, and R5 Recommendations: Monitoring Guidance for TCR, Nitrate, VOC, SOC, LCR Monitoring, Administrative Fines for M/R and Failure to PN for MCL Violations; WaterTrack TCR Data Completeness, L/C Compliance Tracking, and TCR MCL Violation Reporting Several discrepancies noted during the EV appear to be related to the MDEQ Noncommunity program's procedures and guidance.

MDEQ's guidance for assigning total coliform monitoring frequencies does not include semi-annual monitoring which is allowed under MI Rule 706(3) and the federal Total Coliform Rule and was being used by some UP LHDs. MDEQ did not have guidance on TCR monitoring at seasonal supplies closing with an MCL violation or positive sample, or pre-opening TCR sampling at seasonal systems that do and do not depressurize during the off-season (MDEQ's subsequent 12/29/2006 guidance on "Addressing Nonstandard Coliform Rule Sampling" addresses R5's concerns regarding sampling at seasonal supplies closing with an MCL violation or positive sample.) MDEQ should supplement its guidance on special purpose samples for checking the success of disinfection after an MCL violation to include which taps these samples should be taken at. MDEQ should instruct the LHDs to use proper nomenclature in their correspondence and discussions with NCWSs for repeat samples, the 5 routine samples required the next month, and special purpose samples to check the success of disinfection to facilitate tracking.

MDEQ needs to update its guidance on nitrate confirmation sampling, VOC detection monitoring and MCL violation compliance determinations. MDEQ's sampling protocol for NTNCWSs has evolved into sampling for SOCs every 6 years, which does not follow State or Federal regulations.

MDEQ needs to ensure that the most current versions of MDEQ program guidance documents are issued to and used by MDEQ and LHD staff. During the EV, MDEQ Noncommunity Unit staff in the UP District Office were using the November 2001 version of MDEQ's Administrative Fines Policy Summary Administrative Fines Policy which does not specifically state that failure to PN for an MCL violation is subject to the fine amounts for negligent minimum fines. After the EV, Region 5 accessed the March 2005 revised version of the Administrative Fines Policy Summary on MDEQ's website which does specifically state this.

MDEQ should amend its policy and procedures for administrative fines for semi-annual TCR, L/C, etc. monitoring at NCWSs to clarify that issuing a warning, or fining after the first M/R violation is admissible, and that is left to the judgment of the LHD as to which is most appropriate in a given situation. MDEQ's administrative fines policy and procedures should be updated to allow issuing warnings and/or fines for 1) missing a new sampling deadline set for a system on quarterly TCR monitoring before the end of the next quarter, and 2) missing the first quarterly monitoring violation in a 12-month period. The policy should also be updated to require a \$200 fine for failure to collect 4 repeat samples after a positive sample.

MDEQ should take any additional steps needed to ensure that all LHDs have implemented the LCRMR, and enter the correct start year for L/C triennial monitoring, and correct number of samples required into WaterTrack, and instruct systems to provide unique sample location information for L/C sample results. MDEQ should not include lead results from IOC scans in WaterTrack lead/copper analyte group results because they do meet the sample location, collection and analytical methods requirements of the LCR, and expand the sample point and sample description fields on the WaterTrack laboratory sample reports. MDEQ should ensure that LHDs instruct systems opting to sample the rest of their drinking water taps before the end of the CP to not re-sample taps that have already been sampled.

MDEQ should continue to require LHDs to identify any missing TCR sample results from WaterTrack and enter these results before submitting their violation records for review by the DEQ.

MDEQ should modify WaterTrack so it assigns the month a TCR MCL violation begins based on the date of the positive routine sample instead of the date of the positive repeat sample(s). MDEQ should also modify WaterTrack so it assigns a TCR MCL violation for the entire quarter when a system's quarterly routine sample is positive followed by one or more positive repeat samples. SDWIS/FED will accept both an MCL violation reported for the quarter and another reported for the month during the quarter when a system has a second MCL violation when it collects 5 samples the following month.

4.2.6.1 MDEQ Noncommunity Program Guidance for Assigning Total Coliform Monitoring Frequencies

Discrepancy: Systems on semi-annual monitoring: inconsistent with MDEQ Policy

Violations With This Discrepancy:

Delta-Menominee DHD US Forest Service-Admin. (MI2120179) (both halves of 2004 and the 1st half of 2005 - These violations were rescinded and not reported to SDWIS/FED because the system sampled but the laboratory did not forward the results.)

Marquette CHD

St. Louis the king Church (MI5220189) Ist half/2005 semi-annual TCR M/R violation Dickinson-Iron DHD

Blind Duck Inn (MI2220035) September 2004 TCR monthly MCL violation Placing NCWSs on a semi-annual TCR monitoring frequency does not conform to instructions issued by the Chief, MDEQ, Water Supply Section, Noncommunity Unit to the LHDs for assigning total coliform monitoring frequencies and documenting monitoring reductions in the 9/9/99 memo.

R5 post EV comment: Total coliform monitoring reductions to a frequency of no less frequent than annually is allowed by MI Rule 706(3) and the federal Total Coliform Rule based on a satisfactory sanitary survey. MDEQ should update the above guidance to include six-month monitoring. Region 5 recommends that MDEQ consider placing seasonal NCWSs that are only open for two calendar quarters on semi-annual TCR monitoring, so repeated violators will be identified as TCR M/R SNCs by the SDWIS/FED SNC/Exception Tracking System (SETS). When these systems are placed on quarterly TCR monitoring they will not be identified as TCR M/R SNCs by SETS when they repeatedly fail to sample because there will always be two quarters with no violation during the 12-month SNC periods. Identifying these systems as SNCs should help insure that LHDs will take timely and appropriate enforcement actions, and other follow-up actions to protect public health. MDEQ's 4/17/07 response: MDEQ's 'Repeat Violator' tracking identifies seasonal systems having two quarterly M/R violations within a 12-month period. MDEQ can initiate timely and appropriate action without needing to rely on SETS. The suggestion to place seasonal systems that are open for two calendar quarters on semi-annual monitoring is reasonable. DEQ has encouraged LHDs to do this whenever possible.

R5 recommendations:

- A) The instructions for assigning total coliform monitoring frequencies and documenting monitoring reductions should be updated to include semi-annual monitoring.
- B) The instructions for assigning total coliform monitoring frequencies and documenting monitoring reductions should be revised to include systems that are required to take 5 samples per month because they serve 4,100 or fewer people and have not have not undergone a sanitary survey within the last 5 years.

4.2.6.2 TCR Sampling at Seasonal NCWSs

Discrepancy: Repeat Samples Never Taken After Seasonal System Reopened

Violations With This Discrepancy:

Delta-Menominee DHD Camp 7 Campground (Ml2120079) 5/05 TCR monthly MCL violation

The DHD should have required Camp 7 Campground to take 5 routine samples in May of 2005 at the Well #4 system after it re-opened for the season because the 8/23/04 routine sample for well # 4 system was TC+. The DHD's 8/27/04 letter told system it had to take

4 repeat samples within 24 hours from the well #4 hand pump because of the 8/23 TC+ sample. However, an 8/30/04 DHD memo to the file states that the system called to inform the DHD that well #4 was taken out of service for the rest of the season and that the well will be tested in the spring. The system did not collect any repeat samples.

LHD response: Well number 4 is plugged. Number 7 and 8 are the only active Camp 7 wells. Because it was closed for winter, we used our re-opening procedures, which required two samples 8 hours apart. There was a memo stating they called to say their season was over so they did not take the follow up samples.

Western UP District Health Department Lac La Bell Lodge (MI4220029) 12/04 TCR monthly MCL violation

10/8/03 sanitary survey results letter tells the system, if it shuts down all or part of the water system for seasonal purposes, that it must, prior to opening in the spring, disinfect the well and distribution system, completely flush all chlorine residual, and collect at least 2 safe TCR samples after collected at least 8-hours apart, that are free of any chlorine residual.

Luce-Mackinac-Alger-Schoolcraft DHD USFS-Autrain Lake Campground (MI0220006) August 2005 TCR monthly MCL violation

10/4/05 letter to USFS-Autrain Lake Campground system regarding "Following Month Data: 9/6/05 Result 5/5 ND" says based on these results it appears repairs have resolved the issue, and system may return to routine quarterly TCR and annual partial chemistry monitoring. It says system's next 2 TCR samples are due prior to opening in 2006.

Bob Lo Tavern (MI4920482) 2005 Nitrate M/R Violation

The 2/6/06 NOV letter instructs Bob Lo Tavern to submit results for 2 TCR samples and a nitrate sample to be taken prior to opening in 2006. It warns system that future missed samples will result in issuance of applicable \$200 or \$400 civil fines. The system collected 2 TCR samples and a nitrate sample on 4/17/06.

R5 recommendation:

A) MDEQ should issue guidance on TCR sampling at seasonal NCWSs. The guidance should include any well/system disinfection and check sampling requirements for systems that depressurize when they are closed, and those that do not depressurize. The NC PWS Manual should be amended to include guidance on TCR sampling at seasonal NCWSs.

B) MDEQ should issue guidance on follow-up investigation, and corrective action requirements for systems that have a positive sample or MCL violation before closing for the season, and sampling requirements before and after they re-open.

On 8/7/07 MDEQ forwarded R5 a copy of Rich Overmyer, Chief, Noncommunity Unit's 12/29/2006 memo to LHDs regarding "Addressing Nonstandard Coliform Rule Sampling." The memo provides the guidance recommended in A and B above. The NC PWS Manual should be amended to include this guidance on addressing nonstandard coliform rule sampling.

4.2.6.3 Special Purpose Samples to Check the Success of Disinfection Following MCL Violations

The NC PWS Manual does not specify where check samples should be collected. The NCWS program requires systems that have an MCL violation to collect check samples after they disinfect the system. A minimum of 2 consecutive non-detect check samples taken at least 8 hours apart are required. The NCWS Response to Positives flow chart does not provide any information on check sampling or other follow-up steps for MCL violations, other than PN requirements. The MDEQ Noncommunity Unit has previously advised us that one check sample should be taken from a distribution tap and the other from the raw water sample tap. On 6/14/2006, MDEQ issued revised draft flow charts and procedures for follow-up to total coliform and E. coliform positive results to LHD Environmental Health Directors which includes the requirement to collect a minimum of 2 ND "check samples" and increases the required time between these samples to 24 hours.

R5 recommendation: MDEQ should amend its 6/14/2006 draft flow charts and procedures for follow-up to total coliform and E. coliform positive results to specify where check samples should be collected. The NC PWS Manual should be amended to reflect MDEQ's current policy on check samples including where they should be collected.

4.2.6.4 Taking All 5 Routine Samples Required the Month Following a Positive Total Coliform Sample or MCL Violation on the Same Day

Violations With This Discrepancy:

Chippewa CHD
Daily Bread Restaurant (MI1720553)
4/2005 TCR monthly MCL violation

The 4/18/05 letter titled "MCL is Over; 5 Samples Needed for Next Month" issued to Daily Bread Restaurant following its April 2005 TCR monthly MCL violation instructs system to take 5 TCR samples in May 2005, and that it may collect as many as 5 at the same time, as long as each sample is from a tap used for drinking (and not to use mop sinks or outside taps). It should have said that the system may collect as many as 5 at the

same time, as long they are collected from different taps that are used for drinking. The CHD later corrected this language in the letters it sent on 12/13/05 following the 12/8/05 TC+ routine sample, and 1/23/06 following the 1/12/06 positive routine sample. After the EV, DHD advised us that this was corrected in future mailings.

Marquette CHD Tilden Magnetite Partnership (MI5220074) 11/2004 TCR monthly MCL violation

9/15/03 letter to Tilden Magnetite Partnership confirms completion of investigation, disinfection, and successful sampling into compliance for the 9/4/05 MCL violation. It says the investigation could not determine the cause of the TC+ samples prior to disinfection, and requires 5 routine samples during October 2003. It says these samples may be collected from the same tap at the same time. However, systems must collect samples at regular time intervals throughout the month, except that a system that uses only ground water that is not under the direct influence of surface water, and serves 4,500 persons or fewer, may collect all required samples on a single day if they are taken from different sites. It appears that this system has at least two distribution system sampling sites: the kitchen sink, and nurse station-pit. **LHD response:** LHD was lead to believe one sample location was proper. LHD will address this issue in future correspondence.

R5 recommendation: MDEQ's 6/14/2006 draft flow charts and procedures for follow-up to total coliform and E. coliform positive results should be amended to specify that groundwater systems must collect the 5 routine samples required the month following a positive TCR sample or MCL violation at regular time intervals throughout the month, unless they have 5 or more distribution system taps, in which case all 5 samples can be collected at different location on the same day. The NC PWS Manual should be amended to reflect these requirements.

4.2.6.5 Improper Nomenclature for Regulatory Repeat Samples, 5 Routine Samples the Month Following One or More Positive Samples, and Special Purpose Samples to Check Success of Disinfection

Violations With This EV Discrepancy:

Dickinson-Iron DHD Blind Duck Inn (MI2220035) 9/04 TCR monthly MCL violation

NOV letters for TCR MCL violations should refer to positive "repeat" instead of positive "check" samples, and should also refer to the positive routine sample(s) that caused the violation.

Western UP DHD
Keweenaw Mountain Lodge (MI4220010)
Unreported May 2004 TCR monthly MCL violation

The 5/14/04 "approval to resume water service" letter to Keweenaw Mountain Lodge acknowledged receipt of results of ND samples taken on 5/11/04 and 5/12/04, and requires system to take 5 "follow-up" samples by 6/15/04 (and credits another 5/12/04 sample system took towards these 5). The DHD should refer to these 5 samples as routine samples and require them to be taken during the next calendar month the system provides water to the public.

June 2004 TCR acute MCL violation

The 10/6/04 letter following the June 2004 TCR acute MCL violation incorrectly refers to 5 routine samples the next month as follow-up samples, and requires these to be collected by 11/15/04 instead of during October 2004.

Luce-Mackinac-Alger-Schoolcraft DHD USFS-Autrain Lake Campground (MI0220006) August 2005 TCR monthly MCL violation

The 8/11/05 NOV letter refers to the special purpose samples taken to check the success of disinfection as "repeat" samples instead of check samples. Also, it refers to the 5 TCR samples systems must collect the next month they provide water to the public after one or more total colifom-positive samples as "additional follow-up" TCR samples instead of routine samples.

R5 comment: R5 recommends that the DHD refer to the special purpose samples taken to check the success of disinfection as "check" samples instead of repeat samples to distinguish them from repeat samples required by federal and state regulation following positive routine and repeat samples. The 5 TCR samples systems must collect the next month after one or more total coliform-positive samples should be referred to as routine samples instead of "additional follow-up" TCR samples so they are not confused with check samples following disinfection. MDEQ should instruct the LHDs to use proper nomenclature in their correspondence and discussions with NCWSs. This is necessary to facilitate tracking compliance sampling and sampling to check the success of disinfection. Written instructions could be included on draft and final flow charts and procedures for follow-up to total coliform and E. coliform positive results, the NC PWS Manual, and other venues.

LHD response: not provided.

MDEQ's 4/17/06 response: MDEQ agrees the various types of samples should be called by the appropriate name in order to avoid confusion.

4.2.6.6 Nitrate MCL Confirmation Sample

Violations With This Discrepancy:

Western UP DHD Lac La Bell Lodge (MI4220029) 12/04 Nitrate MCL violation

For nitrate MCL violations at NCWSs, the EV team specifically checked for adherence to the NCWS program's T & A actions for MCL violations flow chart, and procedures for responding to nitrate MCL violations outlined in the NC PWS Manual. The NC PWS Manual requires that whenever an initial nitrate sample result exceeds 10 mg/l, a nitrate confirmation sample must be collected from the same location as the original sample. If the average of the two samples exceeds 10.0 mg/l, the MCL for nitrate has been exceeded, and the facility must institute precautionary measures and begin seeking a new source. Precautionary measures include the provision of water from an approved, alternate source (for infants and those who request it) and posting at water outlets.

The NC PWS Manual requires the nitrate confirmation sample be taken within 48 hours of the system receiving notification of a result exceeding the nitrate MCL of 10 mg/l. However, this is less stringent than the 40 CFR 141.23(f)(2) which requires the confirmation sample to be collected within 24 hours.

R5 recommendation: The NC PWS Manual should be amended to reflect current regulatory requirements for nitrate confirmation samples.

4.2.6.7 Late Implementation of the LCR Minor Revisions by LHDs

Violations With This Discrepancy:

Chippewa CHD
Drummond Island Elementary School (MI1720514)
2002-2004 triennial LCR Reduced Tap M/R violation

The 8/3/05 NOV letter asked Drummond Island Elementary School to complete the enclosed form and send it to the CHD, so that the number of lead/copper samples required from the facility can be determined. This should have been done in 2001 when the LCR Minor Revisions were implemented by the MI Noncommunity program.

MDEQ's 4/17/07 response: MDEQ agrees that implementation of the Minor Revisions to the LCR at some LHDs was much later than expected. Part of the difficulty was the changing over to a new database, but the complexity of the LCR also contributes to slowness in implementation.

R5 recommendation: MDEQ should take any additional steps needed to ensure that all LHDs have implemented the LCRMR. Please provide R5 with a schedule for taking additional needed steps and advise R5 when the addition steps have been completed and their results. (On 8/7/07 MDEQ forwarded R5 a copy of Rich Overmyer, Chief, Noncommunity Unit's 6/29/2007 memo to LHDs regarding "Lead Copper Rule Clarifications" which includes a reminder that all NTNCWs must be collecting the chart number of samples for their population and monitoring frequency. It also states that if a system does not have the chart number of drinking water locations, it needs to sample the drinking water locations it has, and this should be documented in WaterTrack under the sample siting plan for lead & copper.)

4.2.6.8 WaterTrack L/C Monitoring Compliance Tracking Limitations

Violations With This Discrepancy:

Chippewa CHD
Drummond Island Elementary School (MI1720514)
2002-2004 triennial LCR Reduced Tap M/R violation

MDEQ should change the way WaterTrack pulls results for the lead/copper analyte group so that only samples analyzed by analytical methods approved under the LCR are included. Results of IOC scans (which includes lead) should not be included as valid lead/copper samples.

MDEQ's 4/17/06 response: The problem of IOC lead results appearing along with Corrosion Control lead results is a glitch that has existed since the beginning of WaterTrack, and it has yet to be fixed. Since most nontransient systems are collecting multiple Corrosion Control samples, and most successfully collect their required number, the chance of missing a Major M/R violation is relatively low. The glitch will be given priority status among new maintenance and enhancement items awaiting approval.

R5 recommendation A: MDEQ should modify WaterTrack so lead results from IOC scans lead results do not appear with lead and copper results. Please advise R5 when this has been corrected.

The CHD should have sent Drummond Island Elementary School a sample reminder and \$200 fine warning (R/FW) notice 30-90 days before the end of the 2002-2004 LCR triennial reduced tap monitoring CP, assessed a \$200 fine for failure to sample by the end of the CP, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be assessed a \$400 fine if it fails to sample by this date. (The 8/3/05 NOV letter does note that "...in part due to computer problems, this monitoring violation was not noticed until now, and the usual extra reminder notice from our office was not sent.")

LHD response: WaterTrack only works for monitoring LCR when the correct start year is entered for the 3-year window. The transfer from T2 to WaterTrack did not incorporate the correct start year, and it was not determined in time to trigger the reminder notice.

MDEQ 4/17/07 response: The transition to WaterTrack from T2 involved a long period in late 2003 and early 2004 where LHDs had no access to a database and tracking system. Even after the arrival of WaterTrack in April 2004, there was a large backlog of data entry and updating of records that needed to be accomplished before LHDs could accurately track monitoring. That some LHDs were late in implementing the Minor Revisions to the LCR compounded the problems they experienced with monitoring in the first year of WaterTrack use.

R5 recommendation B: Per WaterTrack, the CHD is only requiring this system to collect 1 L/C sample per triennial CP. The LCR requires a system of this size to take a minimum of 5 samples when it is on reduced (annual, or triennial) monitoring, and this system apparently has more than 5 drinking fountains and kitchen faucets.

LHD response: The facility was originally identified as having only 1 LCR sample. This has been corrected in the monitoring frequency to 5.

R5 recommendation C: MDEQ should take any additional steps needed to ensure that all LHDs enter the correct number of L/C samples required into WaterTrack. Please provide R5 with a schedule for taking additional needed steps and advise R5 when the addition steps have been completed and their results.

The sample point and sample point description fields on laboratory sample reports in WaterTrack truncates the sample location text.

R5 recommendation D1: MDEQ should take any additional steps needed to ensure that LHDs instruct systems to provide unique sample location information with L/C sample results. Please provide R5 with a schedule for taking additional needed steps and advise R5 when the addition steps have been completed and their results.

R5 recommendation D2: MDEQ should also expand the sample point and sample point description fields on the WaterTrack laboratory sample reports and convert upper case entries to lower case to help ensure capture of location information.

 $4.2.6.9\,$ LHD Instructions to NTNCWSs that Exceed Lead or Copper Action Level based on Chart Number of L/C Samples

Discrepancy: Re-sampling taps before the end of the six-month monitoring period

Violations With This Discrepancy:

Marquette CHD Empire Mine (MI5220072) 2nd half 2003 LCR M/R violation

The 4/3/01 letter to Empire Mines states: "...It is very important to sample as early as possible in the monitoring period to allow you enough time to sample back into compliance if you exceed the action level. Otherwise, if you exceed the action level and are not able to sample back into compliance prior to the end of the CP in which the samples were collected, you are required to provide public education, additional sampling, and propose a treatment option to either initiate a 'treatment study' or install corrosion control treatment."

Chippewa CHD
Drummond Island Elementary School (MI1720514)
2002-2004 triennial LCR Reduced Tap M/R violation

The 8/24/05 letter to Drummond Island Elementary School notifies system that the 5 samples it collected on 8/10/05 exceeded the lead action level (the 90th percentile lead level was .0235 ppm). It explains that only the tap in classroom 111 had a high lead level (.046 ppm, and the 4 others were either ND for lead or had only .001 ppm lead. It tells the system it does not have to provide any PN or posting at this time, presumably because the school was in summer recess. It recommends that, while not required at this time, for good public relations they may want to take the classroom 111 tap off-line until a safe sample is obtained.

There was no documentation in the file that the system took the classroom 111 tap off-line before the school year began and until the lead ND result was received for the 9/12/05 sample. There was also no documentation provided by the system that would account for the difference in lead levels between the samples taken on 8/10/05 and 9/12/05 at this tap.

The 8/24/05 letter also says the easiest and least costly solution would be to collect additional lead and copper samples from other taps at the school by 9/30/05 to try to lower the 90th percentile lead level below the lead action level. It says the additional taps that should be sampled for lead and copper are the 4 other drinking fountains in the school and 4 of the 13 additional taps in the school some of which are not used for drinking (bathroom sinks, janitor or mop sinks, hose bibs, etc.). It also told the system to sample the classroom 111 tap again. The system took 9 additional samples on 9/12/05.

The LHD should not encourage systems to collect more L/C samples just to avoid an action level exceedance.

MDEQ's 4/17/07 response: "MDEQ does not encourage systems to collect more samples just to avoid an action level exceedance. Rather, it is done for the purpose of learning more about a potential contamination problem. If a system collects the chart number of samples and may exceed an action level, our procedure requires them to sample all drinking water taps at the facility to determine the scope of the problem, if they intend to use fixture replacement to address the elevated levels. At the end of a 6-month sampling period, if 90% or more of the sampled taps are below the action level, then it would not be an exceedance. MDEQ further expects that fixtures and piping known to be a problem will be removed even where the 90th percentile does not exceed the action level.

MDEQ's early 2001 model letter, intended for LHDs to make use of if they wish, says, 'It is highly recommended sampling be conducted and reported <u>early</u> in the monitoring period. Starting now will allow adequate time to comply with these complex regulations. Also, if initial results indicate the action level would be exceeded for lead or copper, you will need to contact the (local health department) for further instructions and assistance before the monitoring period expires.'

As always, if there is an exceedance at any one tap, MDEQ and the LHDs expect all drinking water taps and source water to be sampled in order to calculate the 90th percentile value. One might construe this as sampling one's way back into compliance, but actually it is sampling for the purpose of determining compliance."

R5 comment: It appears that rather than taking samples at 8 additional taps, the system may have taken at least 1 sample from a tap that was already sampled on 8/10/05 (Kitchen West). Because the sampling point description in WaterTrack for 3 of the 8/10/05 samples is "classroom," (including the .046 ppm lead sample collected in classroom 111), it cannot be determined if the 9/12/05 samples from classrooms 108, 109, 115, and 118 are from different taps than two 8/10/05 "classroom" samples. Also, sampling point information is not provided for one of the 9/12/05 samples. MDEQ and the LHDs should instruct systems not to collect more than one sample from the same drinking water tap if it has enough or more than enough drinking water taps to collect a L/C sample from the number of sites required by the LCR based on the number of people it serves.

LHD response: This is a WaterTrack issue. The paper copies (attached) show the room location, but the character field in WaterTrack truncates the sample location text.

MDEQ 4/17/07 response: MDEQ agrees that communication about where to collect samples needs to improve.

R5 response: A review of the paper copies provided indicates that in addition to the Classroom 111 tap which exceeded the lead action level on 8/10/05, 2 other taps were re-sampled on 9/12/05 (west kitchen and Classroom 115). A sample point description was not provided for one

of the 9 samples taken on 9/12/05, so it cannot be determined if this was also a re-sample of one of the taps sampled on 8/10/05.

R5 recommendation: MDEQ should ensure that LHDs instruct systems opting to sample the rest of their drinking water taps before the end of the CP after the results of samples taken from the chart number of taps exceeds the lead and/or copper action level not to re-sample taps that have already been sampled. Also, see the recommendation under 4.2.5.9 WaterTrack L/C Monitoring Compliance Tracking Limitations above.

4.2.6.10 Six Year SOC Monitoring

Violations With SOC Discrepancy:

Delta-Menominee DHD US Forest Service-Administration (MI12120179) 1999-2004 SOC M/R violation

Dickinson-Iron DHD North Dickinson School (MI2220046) 1999-2004 SOC M/R violation

MDEQ/LHDs should not reduce SOC monitoring frequency to once every 6 years. State regulations only allow reduced monitoring to one sample every 3 year CP for systems serving less than or equal to 3,300 persons, [state rule 717(7)], and two samples every 3 year CP for systems serving more than 3,300 persons [state rule 717(6)]; or submission of a waiver application [state rule 717(8)]. MDEQ's sampling protocol for NTNCWSs has evolved into sampling for SOCs every 6 years, which does not follow State or Federal regulations. State rule 717(8) states: "Each community and nontransient water supply may apply to the department for a waiver from the requirements of subrule (5), (6), or (7) of this rule. A supplier shall reapply for a waiver for each compliance period." MDEQ's 4/17 response: MDEQ will explore the possibility of incorporating the waiver request into the reminder notice for SOC sampling, whereby successfully collecting a sample within the first three years of a CP allows waiving the sampling requirement for the next three year period, assuming analytical results are below detection limits for all analytes.

R5 Recommendation: MDEQ should proceed with implementing its plan to incorporate SOC waiver requests into the reminder notices for SOC sampling.

4.2.6.11 VOC Detection Monitoring

Violations With VOC Discrepancy:

Delta-Menominee DHD Menominee County Road Commission (MI5520086) System should have sampled 2nd, 3rd, and 4th quarters of 2005

A 3/15/05 letter in the file notifies system that as a result of the VOC confirmation sample collected on 2/25/05 testing ND for all analytes, the MCL violation for methylene chloride detected at 11.6 ug/l in the 2/7/05 sample was not confirmed. It advises system that, because of the elevated levels of methylene chloride and tetrachloroethylene found in the 2/7/05 sample, it must monitor annually for VOCs until the system has established a consistent sampling history, and that its next monitoring period for VOCs will be 1/1/06-12/31/06. The DHD should have required the system to sample for the 2nd, 3rd, and 4th quarters of 2005 to determine if the system exceeded the MCL.

LHD response: MDEQ (was) consulted, they re-sampled and levels were okay. We continued annual sampling which was over and above recommendation by MDEQ.

R5 response: A confirmation sample can be taken, but the result must be averaged with the first sample result. States only have the discretion to delete results of obvious sampling errors from the compliance determination. When monitoring annually or less frequently, the average is used to determine if the system needs to monitor quarterly. Quarterly monitoring was needed to determine if tetrachloroethylene levels were reliably and consistently below the MCL. MDEQ's Phase II/V exceeds MCL - inorganics & organics (other than TTHM) flow chart (updated 4/1/2002) incorrectly uses the average of the result of the initial sample and a confirmation sample for determining compliance with the MCL. When monitoring quarterly, it's a running annual average that is used to determine compliance.

R5 recommendation: MDEQ should update its Phase II/V exceeds MCL - inorganics & organics (other than TTHM) flow chart (updated 4/1/2002) which incorrectly uses the average of the result of the initial sample and a confirmation sample from one quarter for determining compliance with the MCL. A confirmation sample can be taken, but the result must be averaged with the first sample result and the average used to determine if the system needs to monitor quarterly. Compliance with the MCL is based on the running annual average of quarterly sample results. Quarterly monitoring is also required following any detection of a VOC to determine if levels are reliably and consistently below the MCL. States have the discretion to delete results of obvious sampling errors from the compliance determination.

4.2.6.12 MDEQ's Administrative Fines Policy and Procedures

A. Violations of State Drinking Water Standards

Violations With This Discrepancy:

Delta-Menominee DHD Camp 7 Campground (MI2120079) 5/05 TCR monthly MCL Violation

The 5/31/05 NOV letter doesn't instruct the system to send back a sign/dated copy of one of the enclosed PNs. However, a signed/dated copy of PN returned from system is in the file.

LHD response: This is correct, the MCL letter did not contain this. It is now corrected in our form letters.

Western UP DHD
Keweenaw Mountain Lodge (MI4220010)
6/04 TCR acute MCL violation
An NOV letter was not issued for the June 2004 TCR acute MCL violation at Keweenaw Mountain Lodge, and the system was not told to provide PN.

Lac La Bell Lodge (MI4220029) 12/04 TCR monthly MCL violation

The 1/24/04 NOV for the unreported January 2005 TCR MCL violation at Lac La Bell Lodge tells the system to send back a copy of the signed/dated PN but a signed/dated copy of the PN for this violation is not in the file.

If the system did not PN for the 1/05 TCR MCL violation, it should have been fined 1,000 per day up to the maximum amount of fine per violation of \$2,000 under MDEQ's policy and procedures for violations of state drinking water standards.

Luce-Mackinac-Alger-Schoolcraft DHD USFS-Autrain Lake Campground (MI0220006) August, 2005 TCR monthly MCL violation

The 8/11/05 MCL NOV letter should have warned that failure to post PN is subject to a \$1,000 administrative fine instead of a \$200 fine.

Marquette CHD
Tilden Township Hall
11/2004 TCR monthly MCL violation

The NOV letters for TCR MCL violations do not tell the system to send a signed/dated copy of the PN it posts to the CHD. A Copy of the PN signed by the system was in the file for 2 of the 3 MCL violations. A copy of the PN for Tilden Township Hall's October 2005 TCR monthly MCL violation was not in the file.

If the system did not PN for the October 2005 TCR monthly MCL violation, it should have been fined \$1,000 per day up to the maximum amount of fine per violation of \$2,000 under MDEQ's policy and procedures for administrative fines for M/R violations and violations of state drinking water standards.

During the EV, MDEQ's Noncommunity Unit staff in the UP District Office were using the November, 2001 version of MDEQ's Administrative Fines Policy Summary Administrative Fines Policy which does not specifically state that failure to PN for an MCL violation is subject to the fine amounts for Negligent minimum fines. After the EV, Region 5 accessed the March, 2005 revised version of the Administrative Fines Policy Summary on MDEQ's website which does specifically state this.

R5 recommendation: MDEQ needs to ensure the most current guidance on fines for TCR MCL violations is issued to and used by NCWS Unit and LHD staff.

B. Monitoring and Reporting Violations

Violations With Related Discrepancy:

Delta-Menominee District Health Department (DHD) US Forest Service-Administration (MI12120179) 2nd half 2003 lead and copper (L/C) initial tap M/R violation 2nd half 2004 lead and copper (L/C) initial tap M/R violation 1st half 2005 lead and copper (L/C) initial tap M/R violation

Marquette County Health Department (CHD) St. Louis the King Church (MI5220189) 1st half 2005 TCR M/R violation 2nd half 2003 TCR M/R violation

MDEQ needs to clarify the procedures for semi-annual TCR, L/C, etc. monitoring at NCWSs. In MDEQ's policy and procedures for administrative fines for M/R violations semi-annual monitoring falls under the procedures for sampling events required once per year or less frequently. The "Civil Fines for Failure to Monitor" flow chart that sent to LHDs in July 1997

suggests that semi-annual monitoring should be handled under the procedures for sampling events required more frequently than once per.

MDEQ's response of 4/17: MDEQ agrees that neither document specifically addresses which fines procedure should be used with cases of missed 6-month monitoring schedules. Either approach, warning after the first M/R violation or fining after the first M/R violation, is admissible under the Michigan Safe Drinking Water Act (SDWA), PA 399, 1976. It can be left to the judgment of the LHD as to which approach is most appropriate in a given situation.

R5 recommendation 1: MDEQ should amend its policy and procedures for administrative fines for semi-annual TCR, L/C, etc. monitoring at NCWSs to clarify that either approach, warning after the first violation, or fining after the first M/R violation, is admissible, and that is left to the judgment of the LHD as to which is most appropriate in a given situation.

Violations With This Discrepancy:

Delta-Menominee DHD Cedar River Plaza (MI5520143) July, 2005 TCR M/R violation

The 8/3/05 NOV with \$200 administrative fine issued to Cedar River Plaza states that the system is being fined for failing to sample by 7/31/05, the date that system was told it must sample by in the 7/6/05 NOV issued for the 2^{nd} quarter 2005 M/R violation.

Western U.P. DHD Subway-Greenland (MI6620082) 1st quarter/2005 TCR M/R violation

The 4/5/05 NOV letter issued to Subway-Greenland sets a new sample due date of 4/22/05, and states that failure to sample by that date may result in a \$200 administrative fine, and a \$400 fine for each subsequent monitoring violation. The system sampled before the deadline, on 4/11/05, and a fine was not issued.

These LHDs are warning of or issuing fines for a second violation earlier than outlined in MDEQ's administrative fines policy and procedures by issuing warnings and/or fines for missing a new sampling deadline set for a system on quarterly TCR monitoring before the end of the next quarter.

LHD response: Our T2 Corrective Action Plan is based on this and was okayed by DEQ.

MDEQ's 4/17/07 response: The Michigan Safe Drinking Water Act (SDWA), Rule 325.1007 (2) (a), states, merely, the Department may impose a \$200 fine for failure to collect a water sample under this act. "Under this act," of course, includes the rule(s) where the Department can

establish any monitoring requirement at least as stringent as the minimum requirements established in the Act. Relative to this, the Fines Policy offers further guidance for administering fines.

Issuing a fine after the first quarterly monitoring violation or after a missed deadline established prior to the end of a quarter may not be included in the Fines Policy, but it does not exceed the authority of the SDWA.

R5 Recommendation 2: MDEQ's administrative fines policy and procedures should be updated to clarify it allows issuing warnings and/or fines for missing a new sampling deadline set for a system on quarterly TCR monitoring before the end of the next quarter.

Violations With This Discrepancy:

Luce-Mackinac-Alger-Schoolcraft DHD USFS-Autrain Lake Campground (MI0220006) August, 2005 TCR monthly MCL violation

The 8/11/05 MCL NOV letter's warning to USFS-Autrain Lake Campground that systems are subject to a \$200 fine if they fail to collect 5 routine samples the next month they provide water to the public after one or more total coliform-positive samples is earlier than issuing a fine for a second violation as outlined in MDEQ's administrative fines policy and procedures unless this would be the system's second TCR monitoring violation within a 12-month period. The 8/18/05 letter's warning that failure to collect 4 repeat samples will result in a \$200 fine, is earlier than issuing a fine for a second violation as outlined in MDEQ's administrative fines policy and procedures unless this would be the system's second TCR monitoring violation within a 12-month period.

Cedarville Headstart (M14920408) 3rd quarter 2004 TCR M/R violation

The \$200 fine issued to Cedarville Headstart is earlier than issuing a fine for a second violation as outlined in MDEQ's administrative fines policy and procedures. According to SDWIS/FED this was the system's first TCR M/R violation for the 12-month period from 10/1/03 to 9/30/04. Under MDEQ's administrative fines policy and procedures, the systems should be issued a written warning instead of a \$200 fine for the first missed quarterly sample in a 12-month period.

MDEQ's 4/17/07 response: The Michigan Safe Drinking Water Act (SDWA), Rule 325.1007 (2) (a), states, merely, the Department may impose a \$200 fine for failure to collect a water sample under this act. "Under this act," of course, includes the rule(s) where the Department can establish any monitoring requirement at least as stringent as the minimum requirements established in the Act. Relative to this, the Fines Policy offers further guidance for administering fines.

Issuing a fine after the first quarterly monitoring violation or after a missed deadline established prior to the end of a quarter may not be included in the Fines Policy, but it does not exceed the authority of the SDWA.

On 8/7/07 MDEQ forwarded R5 a copy of Rich Overmyer, Chief, Noncommunity Unit's 12/29/2006 memo to LHDs regarding "Addressing Nonstandard Coliform Rule Sampling." The memo recommends, under 2) Timely Repeat Sampling: If a facility owner/operator has been directly told to collect 4 repeat samples after a positive coliform result, and fails to collect the repeats after notification, an administrative fine should be issued and the samples collected within the next 24 hours.

R5 recommendation 3: MDEQ's administrative fines policy and procedures should be updated to clarify that it allows warnings and/or fines for the first monitoring violation in a 12-month period.

4.2.6.13 Sample Results Missing From WaterTrack

Violations With This Discrepancy:

Dickinson-Iron DHD Blind Duck Inn (MI2220035) 9/04 TCR monthly MCL violation

Results for the ND sample taken on 9/17/04 and 9/18/04 cited in the 9/20/04 letter advising system it can remove PN were not in WaterTrack. However, there were handwritten results from the West Iron County Wastewater Plant Lab for 2 ND 9/18/04 samples in the file. These sample results were entered into WaterTrack after the EV.

Marquette CHD Tilden Township Hall (MI5220115) 11/2004 TCR monthly MCL violation

The CHD should have charged Tilden Township Hall with a TCR minor repeat (type 26) violation for only collecting one repeat sample from the raw water tap on 10/10/05 following the TC+ 10/6/05 routine sample from the raw water tap. **LHD response:** Correct, a violation was not entered into WaterTrack. The facility claims it collected all of the required results but only submitted to the LHD one of the four repeat sample results that showed a TC+ result. The facility is currently searching for the remaining sample results. If they are not found and submitted to the LHD, then a violation will be entered in WaterTrack.

R5 response: As of 3/31/08 additional 10/10/05 TCR samples results had not been entered into WaterTrack, and a type 26 violation had not been entered into SDWIS/FED.

Tilden Magnetite Partnership (MI5220074)

Lab slips were in the Tilden Magnetite Partnership file for a TC+ sample taken on 9/4/03 at the nurses station-pit, and 4 repeat samples taken on 9/6/03 3 of which were TC+ including one taken at the nurses station-pit. A lab slip for a TC+ sample taken on 9/29/03 was also in the file. However, these sample results were not in WaterTrack. **LHD response:** Correct, but samples are now entered into WaterTrack. **R5 comment:** As of 3/31/08 these sample results are still not in WaterTrack.

Luce-Mackinac-Alger-Schoolcraft DHD Cedarville Headstart (MI492040) 7-9/04 TCR M/R

There were no TCR results in WaterTrack for Cedarville Headstart for the following quarters, and violations for these quarters have not been entered into SDWIS/FED: 2003 CYQ 1, 2, 3 and 2005 CYQ 3.

LHD response: The sample results are available and were entered into WaterTrack. No M/R violation during this period.

R5 response: The 2005 CYQ 1 and 2 results were entered into WaterTrack after the EV but there were still no results for 2003 CYQ 3 nor 2005 CYQ 3.

MDEQ's 4/17/07 response: The transition to WaterTrack from T2 involved a long period, from Oct. 2003 to Apr. 2004, where LHDs had no access to a database and tracking system. After the arrival of WaterTrack, there was a large backlog of sample data entry for LHDs to address. DEQ believes most LHDs successfully addressed the backlog of sample data entry. There may be an occasional sample or group of samples missing from or misidentified in the WaterChem database. It is part of the LHD's quarterly routine to identify and fix these problems before submitting their violation records for review by the DEQ.

Cedarville Headstart is a seasonal system and is closed during the 3rd quarter. The LHD will be advised to change the facility information in WaterTrack to accurately show the operational season. **R5 response:** The 7-9/04 TCR M/R violation should be deleted from SDWIS/FED.

R5 recommendation: MDEQ should continue to require LHDs to identify any missing sample results from WaterTrack and enter these results before submitting their violation records for review by the DEQ.

4.2.6.14 TCR MCL Violation Reporting To SDWIS/FED

A. <u>Reporting TCR MCL violations for the month the positive repeat sample(s) was taken instead of the month the positive routine sample was taken as required by SDWIS/FED reporting requirements</u>

Violations With This Discrepancy:

Chippewa CHD

Daily Bread Restaurant (MI1720553)

4/2005 TCR monthly MCL violation

This MCL violation should have been entered for March 2005 instead of April 2005 because the routine total coliform positive sample was taken during March 2005 on 3/31/05.

LHD response: By design, WaterTrack calculates an MCL using the repeat confirmation TC+ sample date. If the samples are collected over a two month period, the latter month is flagged for the MCL date.

MDEQ's 4/17/07 response: DEQ has been reporting TCR MCL violations based on the date of the second positive sample for more than ten years, with no prior concern being expressed by the Region. Changing WaterTrack to do otherwise would result in a significant financial cost during very tight budgetary times in Michigan. DEQ will review SDWIS/FED reporting requirements, consult with an IT professional, and make a decision on the priority of this relative to other badly needed enhancements.

R5 recommendation: MDEQ should modify WaterTrack so it assigns the month a TCR MCL violation begins based on the date of the positive routine sample instead of the date of the positive repeat sample(s). We recognize and agree that MDEQ will prioritize enhancements.

B. <u>Reporting TCR MCL Violations for a Single Month Instead of Entire Quarter as Required by SDWIS/FED Reporting Requirements</u>

This issue was not raised in the draft EV charts or discussed with U.P. DO staff during the EV. Following the EV, MDEQ Noncommunity Unit staff advised R5 staff that the Noncommunity program started reporting all MCL violations with a duration of one month in April 2004 after WaterTrack came on line. This was done so they could report 2 consecutive MCL violations (e.g. a system has MCL violation when it performs it quarterly sampling, resolves the violation, and has another MCL violation when it takes the required 5 samples the following month.

R5 recommendation: MDEQ should modify WaterTrack so it assigns a TCR MCL violation for the entire quarter when a system's quarterly routine sample is positive followed by one or more positive repeat samples. SDWIS/FED will accept both an MCL violation reported for the quarter and another reported for a month during the quarter when a system has a second MCL violation when it collects 5 samples the next month.

MDEQ's 4/17/06 response: WaterTrack was designed to represent all TCR MCLs as 1-month violations to help DEQ track where two or more violations occur within the same quarter, indicating where LHDs may be taking systems off precautionary measures too quickly without adequately addressing the problem. Neither WaterTrack nor SDWIS/FED will accept duplicate violation records for the same quarter. The Region is asking MDEQ to report the first of two MCLs as a 3-month violation and the second MCL as a 1-month violation when the second MCL is in the same quarter as the first. Changing WaterTrack to do this seems like a trivial adjustment and makes the first MCL violation record less precise. The adjustment would also cost money. DEQ will review SDWIS/FED reporting requirements, consult with an IT professional, and make a decision on the priority of this relative to other badly needed enhancements.

R5 recommendation: MDEQ should modify Water Track so it assigns a TCR MCL violation for the entire quarter when a system's quarterly routine sample is positive followed by one or more positive repeat samples. SDWIS/FED will accept both an MCL violation reported for the quarter and another reported for a month during the quarter when a system has a second MCL violation when it collects 5 samples the next month.

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Appendices

Appendix A - Michigan Enforcement Flow Charts

Appendix B – Community Water System Program System Specific Findings

<u>Appendices C – H NCWS EV Summary Findings, Region 5 Commendations and Recommendations, and System Specific Findings:</u>

Appendix C - Delta-Menominee DHD

Appendix D – Dickinson-Iron DHD

Appendix E - Western UP DHD

Appendix F - Chippewa

Appendix G - Luce-Mackinac-Alger-Schoolcraft DHD

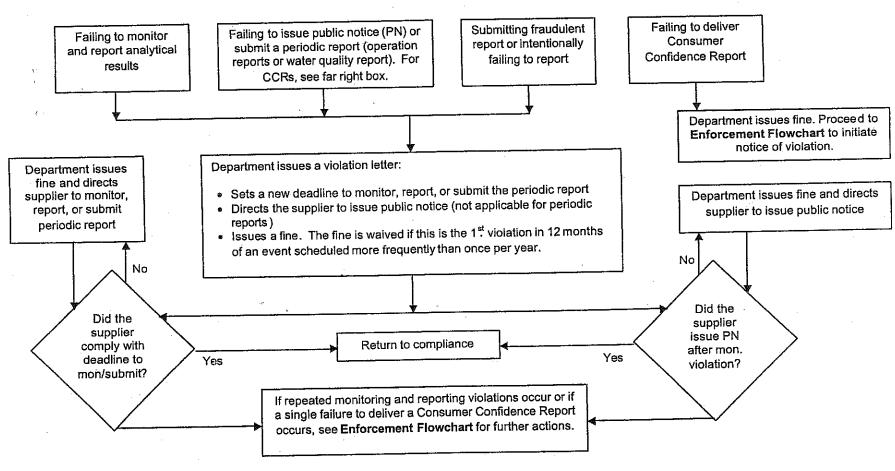
Appendix H - Marquette CHD

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APPENDIX A Michigan Enforcement Flow Charts

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Monitoring and Reporting Violations Flowchart



For more information on fines, see the Administrative Fines Policy Summary (EQ Form 2098 11/2001) or the full text of the policies:

- Administrative Fines Monitoring and Reporting, June 19, 1997 (Rev. #3-9/2001);
- Administrative Fines Violations of State Drinking Water Standards, July 1, 1999 (Rev. #1-6/2000)

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NUMBER:

DWRP-03-001

SUBJECT:

ADMINISTRATIVE FINES - MONITORING AND REPORTING VIOLATIONS

EFFECTIVE DATE:

JUNE 19, 1997 (REV. #3 – 9/2001)

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ISSUE:

Monitoring and reporting requirements and drinking water standards are established for public water supplies under authority of the Michigan Safe Drinking Water Act, 1976 PA 399, as amended (Act 399), for the protection of public health. Administrative fines are established under 1998 PA 56 for those public water suppliers that fail to comply with monitoring and reporting requirements. The administrative fines are to be used as a tool for the Department of Environmental Quality (DEQ) and their authorized agents to promote compliance and meet regulatory enforcement responsibilities.

Suppliers shall be notified of their monitoring and reporting requirements, in writing, such as in a monitoring schedule. This notification should list the location(s) to be sampled, the specific parameters or groups of contaminants to be analyzed, the periodic reports, and the date(s) that the monitoring and reporting must be completed. This notification should also encourage water suppliers to complete required monitoring early in the monitoring period to avoid potential complications that could result in a monitoring violation.

Suppliers shall be assessed an administrative fine for:

- failing to meet monitoring requirements AND to report the results of monitoring;
- · failing to issue public notice following a monitoring violation;
- failing to submit a periodic report (consumer confidence reports, annual water quality reports, and operation reports are subject to this policy); er
- submitting a fraudulent report or intentionally failing to report.

In order to reduce the number of violations and establish needed documentation for enforcement, the supplier shall be reminded of the monitoring requirement or report just prior to the deadline set for that system when the requirement is infrequent such as annual, once per three years, once per six years, etc.

DEFINITIONS:

Monitoring Period: A monitoring period is the period of time during which a sampling event or events are required. For annual or less frequent monitoring, deadlines should be established for submittal of results before the end of the monitoring period. This is necessary to minimize "federal" violations and balance tracking and laboratory work. For example, a water supplier on annual bacteriologic monitoring (January 1, 1994 to December 31, 1994) may be required to submit the sample by November 1, 1994. Likewise, a supplier may be assigned a "monitoring period" of January 1, 1994 through December 31, 1994 for a VOC sample that is federally required to be collected on a three-year cycle. In either case, failure to collect the sample by the state/local established date may result in a reminder or warning or state/local enforcement action including fines. Note, however, a violation is not reported to the federal reporting data system until the full monitoring cycle (one year or three years in the above examples) has expired and no sample has been collected.

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ADMINISTRATIVE FINES - MONITORING AND REPORTING VIOLATIONS

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Reporting: Reporting required under Act 399, and applicable to this policy, includes the results of required sampling, public notices, consumer confidence reports, annual water quality reports, and operation reports.

Sampling Event: A single sampling event is considered to be required sampling during a specific monitoring period from either a single point of entry or a distribution system for a contaminant group, as indicated in Table 1, AND reporting the results of the sampling.

Examples of Single Sampling Events:

Total Coliform

Routine samples, repeat samples, and five routine samples the month following a positive sample (NOTE: The daily monitoring of turbidity at the filter confluence or daily chlorine residual in one month are considered single sampling events.)

Lead/Copper

Tap samples, source samples, water quality parameter samples, and follow-up samples

Phase II/V

Limited scan analysis group "Unit 37" (IOC, SOC, VOC)

POLICY:

General:

Monitoring and Reporting: Failure to collect all of the required samples in a sampling event AND to report the results of all the sampling constitutes a single "monitoring and reporting" violation.

Failure to submit a periodic report is a reporting violation. Periodic reports applicable to this policy are: consumer confidence reports, annual water quality reports, and monthly operation reports.

Suppliers that submit a fraudulent report or intentionally fail to report shall be assessed a \$400 administrative fine for systems serving 10,000 or fewer people or a \$1,000 administrative fine for systems serving more than 10,000 people.

Notifications and Reminders: Suppliers shall be notified of monitoring and . porting requirements, in writing, such as in an annual monitoring schedule. For events or reports required once per year or less frequently, if sample results have not been reported or a periodic report has not been submitted, a supplier shall be reminded, in writing, 30 to 90 days before the established deadline stating the upcoming deadline and that failure to meet this deadline will result in a monitoring and reporting violation and an administrative fine. For events or reports required more frequently than annually, a reminder is not necessary because the first violation in a 12-month running period results in a warning letter but no administrative fine.

Sampling Events or Periodic Reports Required Once Per Year or Less Frequently (i.e., Annually or Once Every Three, Six, or Nine Years):

Suppliers that fail to sample and report results or fail to submit a periodic report by the deadline shall be assessed a \$200 administrative fine for systems serving 10,000 or fewer people or a \$1,000 administrative fine for systems serving more than 10,000 people. When this administrative fine is assessed, the water supplier shall be given a new deadline to collect the required sample(s) or submit

DRINKING WATER AND RADIOLOGICAL POLICY AND PROCEDURES

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the periodic report. The new deadline should be timely but should give the supplier sufficient time to complete the task.

For sampling events: The supplier shall be given a date to issue public notice for railing to sample. Suppliers that fail to issue public notice by the deadline shall be assessed a \$200 administrative fine for systems serving 10,000 or fewer people or a \$1,000 administrative fine for systems serving more than 10,000 people and shall be given another new deadline to issue public notice.

Suppliers that fail to monitor by the new monitoring deadline or fail to issue public notice by the new public notice deadline shall be assessed:

- a \$400 administrative fine for each missed sampling event up to \$2,000, or a \$400 administrative fine for each failure to issue public notice up to \$2,000, or both, for systems serving 10,000 or fewer people; or
- a \$1,000 PER DAY administrative fine from the most recent deadline for each missed sampling event up to \$10,000, or a \$1,000 PER DAY administrative fine for each failure to issue public notice up to \$10,000, or both, for systems serving more than 10,000 people.

When a supplier fails to meet a monitoring deadline or fails to issue public notice, the DEQ or an authorized agent may arrange to collect and analyze required samples, issue public notice, and bill the supplier for this service.

<u>For periodic reports</u>: Suppliers that fail to submit the periodic report by the new deadline shall be assessed a \$400 administrative fine for each failure to submit up to \$2,000 for systems serving 10,000 or fewer people or a \$1,000 PER DAY administrative fine from the most recent deadline up to \$10,000 for systems serving more than 10,000 people.

Sampling Events or Periodic Reports Required More Frequently Than Once Per Year (i.e., Monthly, Quarterly, Weekly, or Daily Monitoring):

For sampling events: The first monitoring violation in a contaminant group in any 12-month period shall be followed by a written warning but shall not result in an administrative fine. The supplier shall be given a deadline to issue public notice. Suppliers that fail to issue public notice after the first monitoring violation in a 12-month period shall be assessed a \$200 administrative fine for systems serving 10,000 or fewer people or a \$1,000 administrative fine for systems serving more than 10,000 people.

If a second monitoring violation for the same contaminant group occurs within one year, suppliers shall be assessed a \$200 administrative fine for the missed sampling event for systems serving 10,000 or fewer people or a \$1,000 PER DAY administrative fine for systems serving more than 10,000 people.

A third or subsequent failure to monitor, or a second or subsequent failure to issue public notice, in the same contaminant group during a 12-month period shall result in:

 a \$400 administrative fine for each missed sampling event up to \$2,000, or a \$400 administrative fine for each failure to issue public notice up to \$2,000, or both, for systems, serving 10,000 or fewer people; or

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 a \$1,000 PER DAY administrative fine from the most recent deadline for each missed sampling event up to \$10,000, or a \$1,000 PER DAY administrative fine for each failure to issue public notice up to \$10,000, or both, for systems serving more than 10,000 people.

For periodic reports: The first failure to submit a periodic report in any 12-month period shall be followed by a written warning but shall not result in an administrative fine. Suppliers that fail to submit a periodic report a second time in a 12-month period shall be assessed a \$200 administrative fine for systems serving 10,000 or fewer people or a \$1,000 administrative fine for systems serving more than 10,000 people. Each additional failure to submit the periodic report that occurs during the 12-month period will result in a \$400 administrative fine up to \$2,000 for systems serving 10,000 or fewer people or a \$1,000 PER DAY administrative fine up to \$10,000 for systems serving more than 10,000 people.

Administrative Fine Determinations:

Administrative fine determinations are to be based upon the frequency of the required sampling, or frequency of the required reporting, using either "once per year or less frequently" or "more frequently than once per year" as indicated above. Administrative fine determinations for violations in one contaminant group (Table 1) do not impact the amount of the administrative fines for violations in another group. Similarly, administrative fine determinations for failure to submit a periodic report do not affect the amount of the administrative fine for failure to submit a different type of report.

Example: A supply serving 10,000 or fewer people is required to monitor for total coliform once per quarter and for nitrate once per year. The supplier fails to monitor for either contaminant. The DEQ directs the supplier to issue public notice for the total coliform monitoring violation and for the nitrate monitoring violation. The DEQ does not fine the supplier for the missed total coliform sampling because this was the first time in a 12-month running period that the supplier failed to monitor in the microbiologic contaminant group. The DEQ fines the supplier \$200 for the missed nitrate sampling and establishes a new date by which the sampling must be completed. The supplier fails to issue public notice for either violation and also fails to sample for nitrate by the new deadline. The DEQ fines the supplier \$200 for failing to issue public notice for the missed total coliform sampling, \$200 for failing to issue public notice for the missed nitrate sampling, and \$400 for the missed nitrate sampling by the new deadline set by the DEQ. The supplier samples for nitrate but still does not issue public notice for the missed nitrate sampling. The DEQ establishes a new date by which the supplier must issue public notice for the missed nitrate sampling event. The supplier fails to issue public notice, and the DEQ fines the supplier \$400. If the supplier continues to fail to issue public notice for the nitrate missed sampling, the DEQ may continue to levy fines of \$400 each time the DEQ sets a new deadline and the supplier fails to meet it, up to \$2,000.

Disputed Administrative Fines:

When administrative fines are assessed but disputed by the supplier, the supplier shall be given an opportunity to resolve the dispute with the DEQ. If the case is not resolved through informal means, the DEQ or its authorized agent will schedule a hearing to resolve the case as outlined in the Administrative Procedures Act, 1969 PA 306, as amended.

Ongoing Monitoring or Reporting Violations:

Formal enforcement actions against a supplier shall be pursued if the supplier repeatedly violates monitoring or reporting requirements despite efforts to curtail this through the notification process and assessment of administrative fines under this policy.

DRINKING WATER AND RADIOLOGICAL PROTECTION DIVISION POLICY AND PROCEDURES NUMBER: DWRP-03-001 SUBJECT: ADMINISTRATIVE FINES – MONITORING AND REPORTING VIOLATIONS EFFECTIVE DATE: June 19, 1997 (Rev. #3 – 9/2001) PAGE: 5 of 5

Voiding an Administrative Fine:

An administrative fine may be voided before or after a requested hearing, with supporting documentation, if:

- 1. The supplier produces documentation that the report was submitted when required, such as providing a certified mail receipt.
- 2. The sample was collected but could not be accurately analyzed due to either a sample transit problem or laboratory error.
- 3. Due to a change in ownership, the new owner was not notified of the monitoring or reporting requirements.
- 4. The supplier was unable to meet the monitoring or reporting requirements due to compelling reasons or extenuating circumstances beyond the reasonable control of the supplier, for which documentation is provided to the DEQ and found to be satisfactory by the Section Chief in the Field Operations Section, the Ground Water Supply Section, or the Environmental Health Section or the Environmental Health Director for local health jurisdictions under contract with the DEQ.

PROCEDURE:

Section Chief

Action Responsibility 1. Notifies the supplier, in writing, of the DEQ Employee, or the local health monitoring and reporting requirements and department personnel for the Noncommunity sends a reminder 30-90 days before the Program deadline, if appropriate. Determines a violation has occurred and sends a warning letter, if appropriate. Completes a request for an invoice and submits it to the Administration Section with the appropriate documentation. 2. Creates the invoice for the administrative fine Administration Section and mails it with the documentation. 3. Coordinates disputed administrative fines and requests for a hearing.

APPROVED: Mint Watt DATE: 9/11/01
Flint C. Watt, P.E., Chief

4. Serves as the final decision point for voiding

administrative fines.

Drinking Water and Radiological Protection Division

Attachment: Table 1 (Contaminant Groups)

Table 1: Contaminant Groups

Microbial Group

Bacteria

Total coliform Fecal coliform E. Coli

Surface Water Treatment Group

Chlorine Residual

Free chlorine Total chlorine

Turbidity

"C*T" Determination

Chemical Group

<u>Asbestos</u>

Cyanide

Partial Chemistry

Fluoride Nitrate Nitrite Total nitrate & nitrite Sodium

Limited Metals

Antimony Beryllium Nickel Thallium

Complete Metals

Includes "Limited Metals" plus: Arsenic Barium Cadmium Chromium Mercury Selenium

Total Trihalomethanes (TTHM)

Chloroform Dibromochloromethane Bromodichloromethane Bromoform

TTHM Maximum Formation

Potential

Chloroform

Dibromochloromethane Bromodichloromethane Bromoform

VOC

Benzene

Carbon tetrachloride
o-dichlorobenzene
Para-dichlorobenzene
1,2-dichloroethane
1,1-dichloroethylene
Cis-1,2-dichloroethylene
Trans-1,2-dichloroethylene
Dichloromethane
1,2-dichloropropane
Ethylbenzene
Monochlorobenzene
Styrene

Tetrachloroethylene Toluene

1,2,4-trichlorobenzene 1,1,1-trichloroethane 1,1,2-trichloroethane Trichloroethylene Xylenes (total)

Limited SOC

Vinyl chloride

Alachlor
Aldicarb
Aldicarb sulfoxide
Aldicarb sulfone
Atrazine
Carbofuran
Chlordane
Dinoseb
Endrin
Heptachlor

Heptachlor epoxide
Hexachlorobenzene
Hexachlorocyclopentadiene

Lindane Methoxychlor Oxamyl (vydate) Pentachlorophenol

Picloram

Polychlorinated biphenols

Simazine Toxaphene 2,4-D 2,4.5-TP silvex

Expanded SOC

Dalapon
Dibromochloropropane (DBCP)
Diquat
Endothall
Ethylene dibromide (EDB)
Glyphosate

Polynuclear Aromatics

Benzo(a)pyrene Di(2-ethylhexyl)adipate Di(2-ethylhexyl)phthalate

Dioxin

2,3,7,8-TCDD

Radiologic Group

Natural Radioactivity

Gross alpha Radium-226 Radium-228

Man Made Radioactivity

Gross beta Tritium Strontium-90

Lead/Copper Group

Lead & Copper

Lead Copper

Corrosion Control

pH
Alkalinity
Calcium
Conductivity
Temperature
Orthophosphate
Silica

DE₫

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY DRINKING WATER AND RADIOLOGICAL PROTECTION DIVISION P.O. BOX 30630, LANSING, MI 48909-8130

John Engler, Governor Russell J. Harding, Director Internet: www.deq.state.mi.us/dwr/

ADMINISTRATIVE FINES POLICY SUMMARY

Drinking water standards and monitoring and reporting requirements are established for public water supplies under the Safe Drinking Water Act, 1976 PA 399, as amended. Administrative fines are established under 1998 PA 56 for those water supplies that fail to meet state drinking water standards or fail to comply with monitoring and reporting requirements.

Suppliers that fail to meet monitoring or reporting requirements are subject to administrative fines. Failure to collect the required samples in a sampling event constitutes a violation. A sampling event consists of all required sampling for a contaminant group during a specific monitoring period from a single point of entry or from the distribution system. Examples may include: annual nitrate sample from a well during a calendar year, lead and copper tap samples from all the required sites during a specified monitoring period, or monthly bacteriological monitoring. Systems that fail to report analytical results or other required information also violate reporting requirements and are subject to fines. Failure to issue public notification as required is also a violation subject to fines.

Monitoring, Reporting, and Public Notice Violations	Systems Serving ≤ 10,000 People	Systems Serving > 10,000 People
Submits fraudulent report or intentionally fails to report	\$400	\$1,000
Failure to submit report or perform sampling scheduled once per year or less frequently	\$200	\$1,000
Failure to submit report or monitor by the new deadline set by Department of Environmental Quality (DEQ)	\$400	\$1,000 per day
Failure to submit report or perform sampling scheduled more frequently than once per year a 2 nd time in a 12-month running period (1 st failure followed by written warning, but no fine)	\$200	\$1,000 per day
Each additional failure to submit report or monitor in 12-month running period	\$400	\$1,000 per day
Failure to issue <u>public notice</u>	\$200	\$1,000
Subsequent failures to issue public notice	\$400	\$1,000 per day
Failure to report analytical results of sampling	\$200	\$1,000
Failure to report analytical results by new deadline set by DEQ	\$400	\$1,000 per day
Maximum fine per sampling event	\$2,000	\$10,000

Suppliers that fail to exercise due diligence to prevent, report, or resolve a state drinking water standard violation or fail to issue public notice of the violation are subject to administrative fines. The contributory fine applies when the DEQ determines that a single action or inaction may have contributed to a violation of a state drinking water standard or increased exposure to water exceeding a standard. Additional fines may be added for each additional action or inaction that may have contributed to the violation up to a maximum amount. The negligent fine applies after a violation of a state drinking water standard has been identified and the supplier of water has failed to comply with DEQ directives to minimize public exposure associated with exceedance of a state drinking water standard.

Violations of State Drinking Water Standards	Supplies that Serve <pre> ≤ 10,000 People</pre>	Supplies that Serve > 10,000 People
Contributory minimum fine	\$400	\$1,000
Each additional contributory action or inaction results in additional fines	+ \$200	+ \$400
Negligent minimum fine	\$1,000 per day	\$2,000 per day
Maximum per day per violation administrative fine for any state standard	\$1,000 per day	\$2,000 per day
Maximum amount of fine per violation	\$2,000	\$10,000

This is only a summary for information purposes. For the full text of the policies, please contact the Drinking Water and Radiological Protection Division, Field Operations Section, at 517-241-1300; Policy and Procedures DWRP-03-001, Administrative Fines - Monitoring and Reporting Violations, effective June 19, 1997 (Rev. #3 – 9/2001); Policy and Procedures DWRP-03-012, Administrative Fines - Violations of State Drinking Water Standards, effective July 1, 1999 (Rev. #1 – 6/2000).

The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability or political beliefs. Questions or concerns should be directed to the MDEQ Office of Personnel Services, P.O. Box 30473, Lansing, MI 48909.

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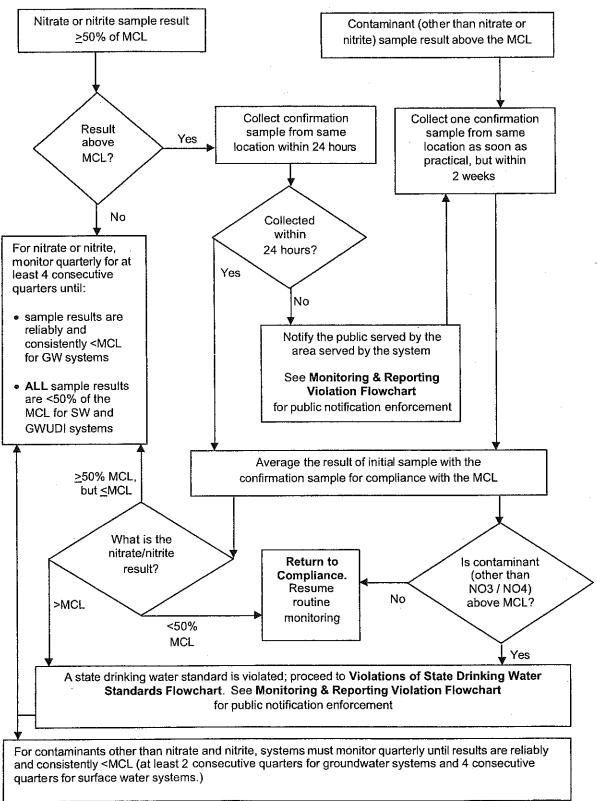
Total Coliform-Positive Flowchart

Routine sample result total coliform-positive · If fecal or E.coli positive, contact DEQ For each total coliform-positive sample result, the supplier must collect repeat samples within 24 hours of notification of the positive result 1 at the same location 1 upstream within 5 service connections 1 downstream within 5 service connections 1 at another location in the distribution system if the supplier routinely collects only 1 routine sample per month. Repeat sample result? Fecal or E. Coli positive* Total coliform (only) positive* Total coliform negative Contact DEQ Was original Acute MCL violation; Yes sample immediate public fecal/E. Coli notification required positive? Were 2 or more sample results positive (for systems that collected <40 samples in the month)? Were >5% of sample results positive (for systems that collected ≥40 samples in the month)? Yes Suppliers that collect fewer than 5 routine samples Non-acute MCL violation per month must collect at least 5 samples from the distribution system during the month See Violations of State Drinking Water following a total coliform -Standards Flowchart positive result. No MCL violation for further action The department may waive this requirement if it determines, through a site visit The department may require suppliers that were monitoring on a or documentation, that the reduced frequency under R 325.10705(3) or R 325.10706(3) to problem has been corrected. resume monitoring at a regular frequency. The decision will be in writing.

- Under Rule 707a(1)(b) if the department determines that the original total coliform positive sample resulted from a non-distribution plumbing problem, then the department may invalidate the sample if:
 - the SAMElocation repeat sample(s) is (are) total coliform positive and
 - all other repeat samples are total coliform negative
 - the system consists of more than one service connection

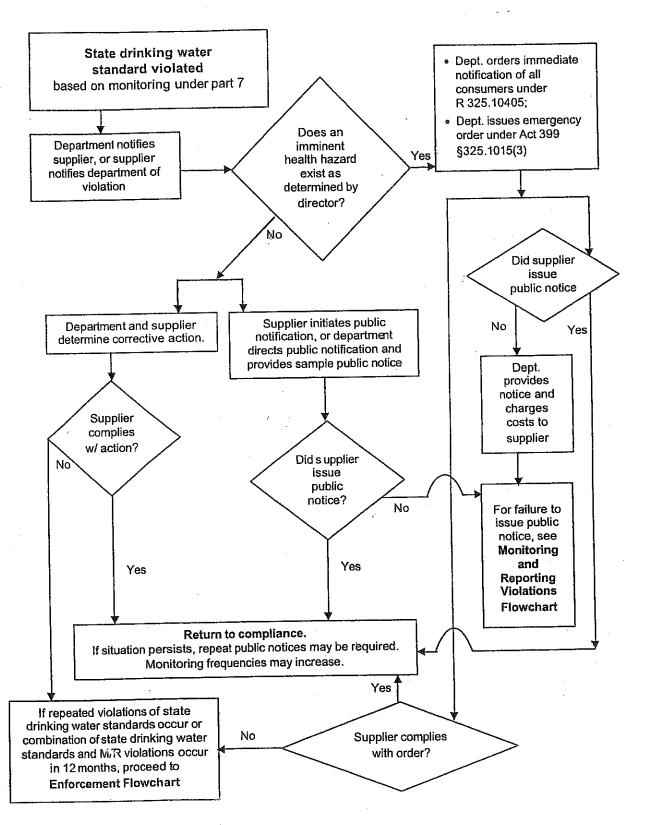
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Phase II/V Exceeds MCL Flowchart Inorganics & Organics (other than Total Trihalomethanes)



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Violations of State Drinking Water Standards Flowchart





NUMBER:

DWRP-03-012

SUBJECT:

ADMINISTRATIVE FINES - VIOLATION OF STATE DRINKING WATER STANDARDS

EFFECTIVE DATE:

JULY 1, 1999 (REV. #1 - 6/2000)

PAGE: 1 OF 4

ISSUE:

Drinking water standards are established for public water supplies under the Safe Drinking Water Act, 1976 PA 399, as amended (Act 399). Administrative fines are established under 1998 PA 56 for those water supplies that fail to meet state drinking water standards. These fines are to be used as a tool for the Department of Environmental Quality (DEQ) and their authorized agents to promote compliance and meet regulatory requirements.

Exposure to drinking water that exceeds a state drinking water standard puts the public health at risk. Suppliers of water to the public are responsible to comply with regulations to construct, operate, and maintain drinking water systems in a manner which prevents violations of drinking water standards and to take immediate action to protect public health, issue public notice, investigate, and resolve such violations if they occur.

The exceedance of a state drinking water standard can occur even though the water supplier has complied with regulations, procedures, and good practices; and a violation can continue even though the supplier follows all DEQ rules and recommendations to find and correct the problem. In such cases, administrative fines are normally not appropriate. However, suppliers of water that fail to exercise due diligence to prevent, report, or resolve a violation of state drinking water standards or fail to issue public notice of the violation of state drinking water standards are subject to administrative fines in accordance with this policy.

DEFINITIONS:

Contributory Category Fine: An administrative penalty issued for failure to comply with a regulation, policy, or procedure resulting in a condition which could have caused or contributed to the violation of a state drinking water standard or increased public exposure to water exceeding a state drinking water standard. This fine is not calculated on a per day basis but rather per violation of a drinking water standard where there are contributory actions or inactions. The amount of fine can be increased based on the number of contributory actions or inactions.

Examples of contributory category fines:

- Putting a public water system into service without DEQ approval.
- Failure to properly disinfect.
- Constructing or altering a water system in violation of Act 399.
- Failure to operate and maintain a well, distribution system, or treatment system in accordance with Act 399.
- Failure to maintain optimal corrosion control treatment which results in exceedance of a lead or copper action level.

NUMBER:

DWRP-03-012

SUBJECT:

DVVKF=03-012

EFFECTIVE DATE:

ADMINISTRATIVE FINES - VIOLATION OF STATE DRINKING WATER STANDARDS

JULY 1, 1999 (REV. #1 - 6/2000)

PAGE: 2 of 4

Negligent Category Fine: An administrative penalty for each day the supplier of water fails to comply with a DEQ directive, compliance schedule, consent agreement, or order, fails to issue public notice; or fails to minimize public exposure associated with violation of a state drinking water standard. This fine is calculated on a per day basis.

Examples of negligent category fines:

- A water supply that was required to replace a defective vent on its elevated tank by a specific date and fails to comply with the compliance schedule; subsequently, a bird entered the vent causing a violation of the drinking water standard for coliform bacteria.
- A water supply with a maximum contaminant level violation for colliform bacteria was ordered to flush the water system and chlorinate and fails to comply with that requirement.
- A water supply exceeds turbidity limits after missing a deadline to complete specific improvements which would have eliminated or minimized this turbidity excursion.
- A water supply that exceeds drinking water standards and fails to comply with public notice requirements after being notified of the requirement.

State Drinking Water Standard: Quality standards setting limits for contaminant levels or establishing treatment techniques to meet standards necessary to protect public health.

POLICY:

Public Water Supplies Serving a Population of Not More Than 10,000:

Contributory Category Fines: The contributory category of a fine shall apply to a supplier of water when the DEQ determines an action or inaction on the part of the water supplier may have contributed to a violation of a state drinking water standard or increased exposure to water exceeding a state drinking water standard. The minimum contributory fine is \$400 per drinking water standard violation and is applied when there is a single action or inaction that contributed to the violation. For each additional action or inaction which may have contributed to the violation, \$200 may be added to the minimum \$400 fine, up to a maximum of \$1,000 per drinking water standard violation.

Negligent Category Fines: The negligent category of a fine shall apply to a supplier of water after a violation of a state drinking water standard has been identified and the supplier of water has failed to comply with a DEQ directive, compliance schedule, consent agreement, public notice requirements, or order to minimize public exposure associated with exceedance of a state drinking water standard. The negligent category fine is \$1,000 per day as listed in the following schedule of fines:

SCHEDULE OF FINES: For water systems serving a population of not more than 10,000:

Contributory Category Fine

\$ 400

Each Additional Contributory Action or Inaction

+ \$ 200

Negligent Category Fine

\$1,000 per day per violation

	DRINKING WATER AND RADIOLOGICAL PROTECTION POLICY AND PROCEDURES	DIVISION	
NUMBER: SUBJECT: EFFECTIVE DATE:	DWRP-03-012 ADMINISTRATIVE FINES - VIOLATION OF STATE DRINKING WATE JULY 1, 1999 (REV. #1 - 6/2000)	R STANDARDS PAGE:	3 of 4

NOTE: For water systems serving not more than a population of 10,000, the administrative fine for any state drinking water standard violation cannot exceed \$1,000 per day per violation or a total of \$2,000 per violation.

Public Water Supplies Serving a Population of More Than 10,000:

Contributory Category Fines: The contributory category of a fine shall apply to a supplier of water when the DEQ determines an action or inaction on the part of the water supplier may have contributed to a violation of a state drinking water standard or increased exposure to water exceeding a state drinking water standard. The minimum contributory fine is \$1,000 per drinking water standard violation and is applied when there is a single action or inaction that contributed to the violation. For each additional action or inaction which may have contributed to the violation, \$400 may be added to the minimum \$1,000 fine, up to a maximum of \$2,000 per drinking water standard violation.

Negligent Category Fines: The negligent category of a fine shall apply to a supplier of water after a violation of a state drinking water standard has been identified and the supplier of water fails to comply with a DEQ directive, compliance schedule, consent agreement, public notice requirement, or order to minimize public exposure associated with exceedance of a state drinking water standard. The negligent category fine is \$2,000 per day as listed in the following schedule of fines:

SCHEDULE OF FINES: For water systems serving a population of greater than 10,000:

Contributory Category Fine		\$1	,000
Each Additional Contributory Action or Inaction	+	\$	400

Negligent Category Fine \$2,000 per day per violation

NOTE: For water systems serving a population of greater than 10,000, the administrative fine for any state drinking water standard violation cannot exceed \$2,000 per day per violation or a total of \$10,000 per violation.

Disputed Fines:

The supplier may request a hearing within 30 days of the assessment of an administrative fine. If requested by the supplier, a hearing to resolve the case is to be scheduled by the DEQ or its authorized agent as outlined in the Administrative Procedures Act, 1969 PA 306, as amended.

Ongoing Violations of Drinking Water Standards:

Formal enforcement actions or a reassessment of the source of supply or treatment required shall be pursued if the supplier repeatedly violates drinking water standards or associated public notification requirements.

NUMBER:

DWRP-03-012

SUBJECT:

ADMINISTRATIVE FINES - VIOLATION OF STATE DRINKING WATER STANDARDS

EFFECTIVE DATE:

JULY 1, 1999 (REV. #1 - 6/2000)

PAGE: 4 of 4

Voiding a Fine:

A fine may be voided before or after a requested hearing if the fine is found to have been issued based on incorrect information or no violation of a state drinking water standard has occurred. Other extenuating circumstances will require the approval of either the responsible Section Chief in the Field Operations Section, the Ground Water Supply Section, or the Environmental Health Section or by the Environmental Health Director for local health jurisdictions under contract with the DEQ. Documentation of the basis for the action is required in all cases.

PROCEDURE:

Responsibility	Action
DEQ Employee/Representative and Supervisor	 Determines violation has occurred, completes request for invoice, and after approval by supervisor, submits to the Administration Section with appropriate documentation.
Administration Section	Creates invoice for administrative fine and mails with documentation.
	 Coordinates disputed fines and requests for hearing.
Section Chief	 Serves as final decision point for voiding fines.

APPROVED: - The

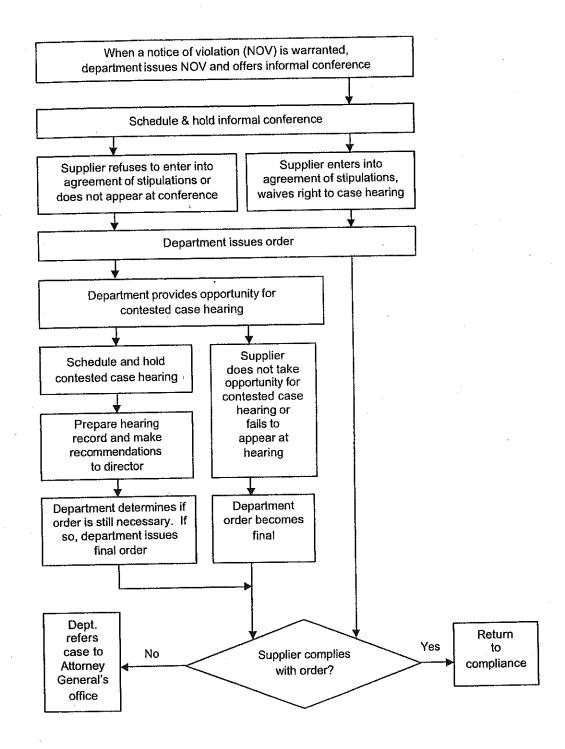
Flint C. Watt, P.E., Chief

Drinking Water and Radiological Protection Division

Date:

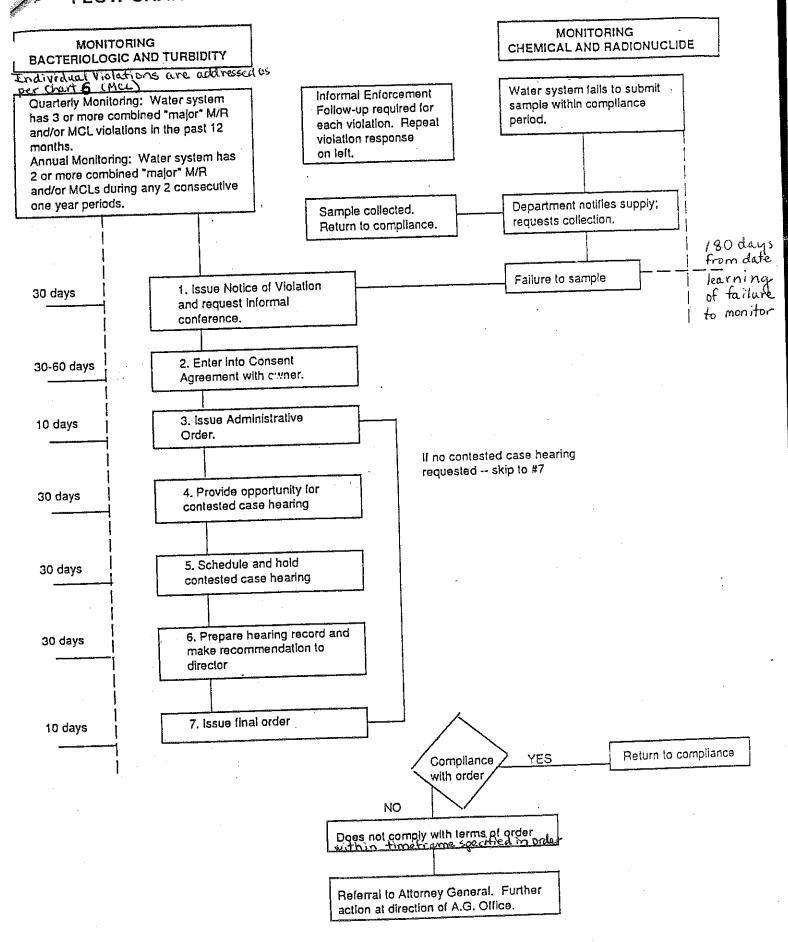
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Enforcement Flowchart



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MDPH MONITORING VIOLATIONS NONCOMMUNITY FLOW CHART SHOWING "TIMELY AND APPROPRIATE" ACTIONS

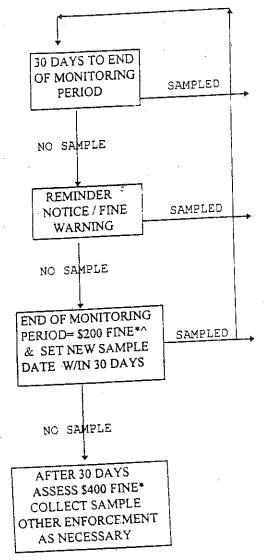


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CIVIL FINES FOR FAILURE TO MONITOR Act 399 P.A. of 1976 as Amended

NONCOMMUNITY WATER SUPPLY PROGRAM

Shown: General Warning/Fine Process



SEE DEQ Fines Policy 1997-03-001

- Violations in one contaminant group do not impact violations in another group relative amount of fine.
- 2. Fines may be voided in accordance with policy.
- 3. Appeals heard in accordance with APA, Act 306 of 1969 by agency issuing fine.

* Includes violation and public notice to owner and FRDS

^ For quarterly or more frequent monitoring only, a written warning (in lieu of first fine) is issued with public notice and FRDS

DWRPD 7/97

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STATE OF MICHIGAN



JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY REPLY TO:

"Better Service for a Better Environment"
HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973
INTERNET: www.deq.state.mi.us

RUSSELL J. HARDING, Director

DRINKING WATER & RADIOLOGICAL PROTECTION DIVISION 3423 N MARTIN L KING JR BLVD PO BOX 30630 LANSING MI 48909-8130

EQP 0100e (Rev. 10/96)

September 9, 1999

TO:

Noncommunity Program Coordinators

NCWS 99-4

FROM:

Richard L. Overmyer, R.S., Chief

Noncommunity Unit

Ground Water Supply Section

Drinking Water and Radiological Protection Division

SUBJECT:

Assignment of Total Coliform Monitoring Frequencies and Documenting

Monitoring Reductions

ISSUE:

Noncommunity public water supply owners are required to collect samples on a schedule at least equal to that required in the Safe Drinking Water Act, 1976 PA 399, as amended. Rule 706 establishes frequencies for noncommunity systems and allows certain reductions. For the purpose of affirming good public health practices and providing statewide program consistency, the following conditions will outline the standard monitoring frequencies and changes where applicable.

Total Coliform Monitoring Frequency

1			
Monthly Quarterly	More than 1000 persons served by system Serves less than	Cannot reduce frequency Quarterly	Large Noncommunity systems must sample at same frequency as like-sized Type I. Rule 706 (2)(a) Standard frequency is quarterly. Rule
1001 persons	(for minimum of 1 year)	706(2)(c). Need to establish minimum of 1- year good sampling history prior to allowing a reduction. Cannot reduce without a satisfactory sanitary survey.	
Quarterly	Good samples for a minimum of one year	Annual (allowed reduction from quarterly)	Reduction allowed based on satisfactory sanitary survey and past sampling history. Rule 706(3)

. ·		

7) Noncompliance status: A sanitary survey is done at a factory. A cross connection survey discovers a treated boiler and an irrigation system without backflow protection. A correction order is sent and the facility reverts to quarterly sampling. An approval to reduce coliform monitoring frequency cannot be approved until distribution system corrections are made and approved.

Noncommunity Program Coordinators Page 3 September 9, 1999

IMPLEMENTATION:

An across the board review of all monitoring frequencies is not necessary at this time. The procedures outlined in this document should be implemented as follows:

- a) When systems are identified as serving more than 1000 persons per day
- b) New wells or existing systems are added to the inventory
- c) When total coliform monitoring violations occur
- d) After a total coliform MCL violation
- e) At the time of a sanitary survey

DOCUMENTATION:

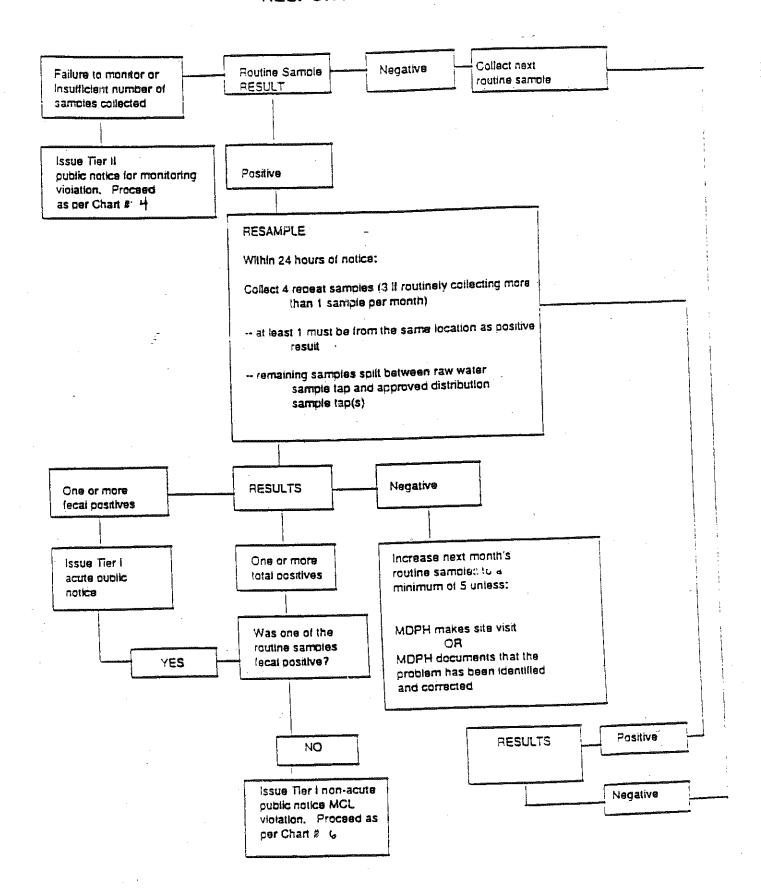
It is important for both the water supply owner and the regulatory agency that any increase or reduction in monitoring frequency be documented. Documentation should be done both on paper and electronically as follows:

- 1) Sanitary survey transmittal letter citing compliance and good sampling history.
- 2) Follow-up inspection compliance letter citing construction compliance and good sampling
- 3) Specific letter informing owner of reduction and citing compliance and good sampling history.
- 4) Electronic documentation should routinely be done in the T2 program. Whenever a different sampling frequency is assigned, the corresponding change has to be made in the T2 program (see document NCWS 99-3).
- 6) It is recommended that a calendar summarizing the water supply's sampling requirements be sent to the owner/operator with any monitoring increase or reduction notice.

If there are any questions, please contact the noncommunity staff person assigned to your agency.

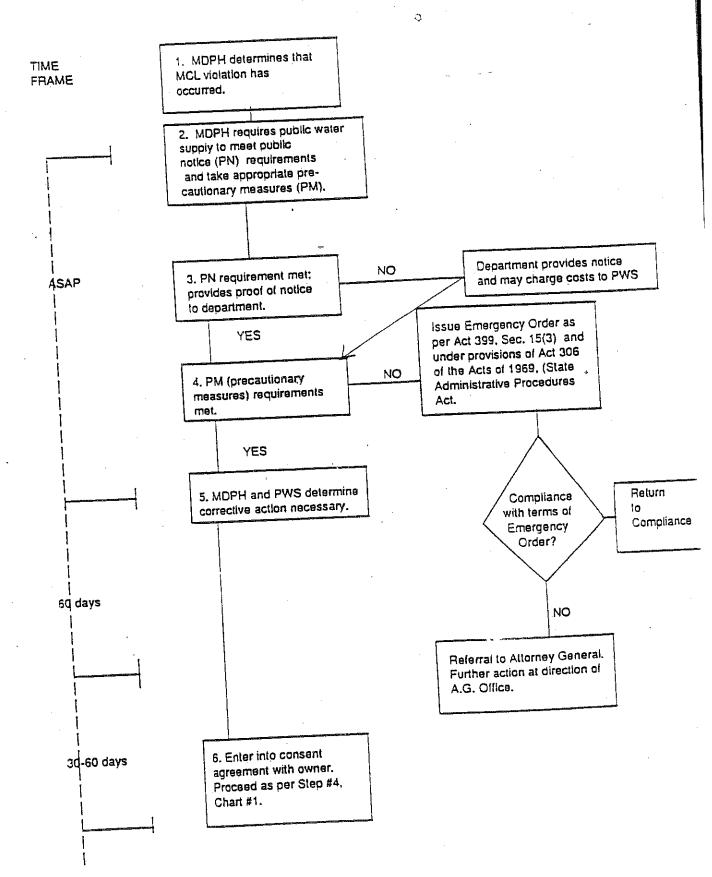
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MDPH - NONCOMMUNITY BACTERIOLOGIC MCL DETERMINATION FLOW CHART RESPONSE TO POSITIVES

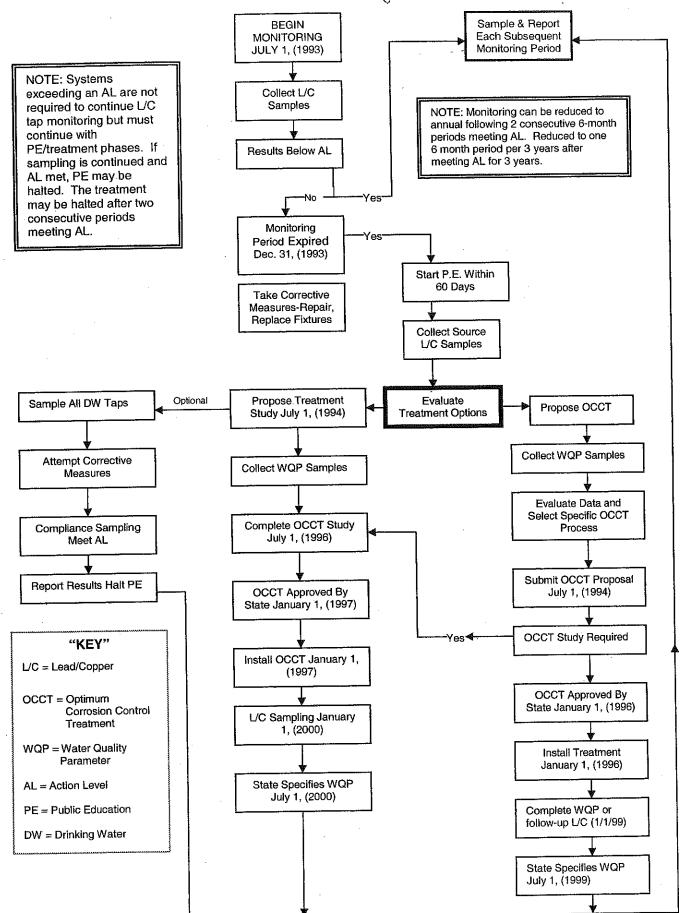


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MDPH - NONCOMMUNITY FLOW CHART SHOWING "TIMELY AND APPROPRIATE ACTION" FOR MCL VIOLATIONS



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SYSTEM	SYSTEM	System	Viola-	Does State Action	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/	tions	Follow	
		Pop.		Flow Chart?	
MI0002590	Sherman	CWS/40	10/03	Yes-The 11/21/03	11/21/03 NOV letter incorrectly refers to a monthly operations report
	Township		SWTR	NOV letter requires	(MOR) for 11/03 instead of 10/03.
	1		TT	the system to post	
				enclosed PN no later	The sample PN sent with the 11/21/03 NOV correctly says that 100% of
				than 30 days after it	the turbidity measurements for water samples taken in 10/03 exceeded
				learned of the	.5 turbidity units (NTU) and this exceeded the standard that no more
				violation, and to send	than 5% of samples may exceed .5 NTU/month. The PN also provides
				a signed and dated	information on potential health effects.
				copy of the notice to	-
				MDEQ within 10	A spreadsheet which includes monthly average, maximum and
				days after it provides	minimum filter confluence turbidity readings for this system provided
				it to its customers.	by MDEQ staff during the EV also flags turbidity violations for 11/03,
				MDEQ received a	12/03, and 1/04.
				letter from the system	
				12/18/03. The letter	The 11/03, 12/03, and 1/04 violations were not reported to S/F.
				stated that "copies of	·
				the enclosed letter are	It appears that 11/2/03 state return to compliance (SOX) date linked to
				being mailed to our	the 10/03 violation was premature because the spreadsheet indicates the
				customers by	new well was to go online on 2/10/04.
				12/17/02." This letter	
				includes a copy of the	
				PN. The letter also	
	:			advises that the water	
				system is being	
				replaced by a	
				community well.	
MI0003120	Hermansville	CWS/36	12/05	Yes-except that the	

	Housing	TCR	warning in the NOV	
	Community	M/R	letter that any	
	Community	171710	additional M/R	
			violations are subject	
			to fines of increasing	
			amounts is not	
			consistent with the	
			state civil fine policy	
			which says	
			"Administrative fine	
			determinations for	
			violations in one	
			contaminant group	
			(Table 1) do not	
			impact the amount of	
			the administrative	
			fines for violations in	
			another group.	
			The NOV letter	
			directs the system to	İ
			issue public notice	
			not later than 1 year	
			after learning of the	İ
			violation. It encloses	
			a sample PN, and	
			directs the system to	
			send MDEQ a signed	
			and dated copy of the	
			notice that it posts	
			within 10 days of	
			posting the PN. It	
<u> </u>			warns the system it	

MI0061662	Covington Rest Home	CWS/45	10/04 TCR M/R	will receive a \$200 if it fails to PN. A signed copy of the PN dated 3/21/05 is in the file. Yes 1/19/05 NOV requires the system to issue public notice not later than 1 year after learning of the violation. It encloses a sample PN, and directs the system to send MDEQ a signed and dated copy of the	The CWS program is commended for issuing a fast track consent order with civil penalty to the system requiring it to drill a backup well which had not been required by the LHD.
				within 10 days of posting the PN. It says the system may want to use its CCR (assuming a copy is provided to each customer) as the vehicle to post the PN. A copy of a PN signed and dated by the system is not in the file.	

Appendix B
Community Water System Program System Specific Findings

MI0003630	Kinross	CWS/	8/03	Yes- But only 2 of	MDEQ advised during the EV that the MCL violation was restricted to
	Township	7,341	TCR	the 4 repeat samples	the "corner" of the water system where a new portion of the new water
		E .	month-	collected on 8/18	main was put on line system and the system took hydrant samples
			ly MCL	following the 8/14/	because they were trying to show the TC+s were related to the
				TC+ routine sample	construction of the new water main.
				were collected from	
			-	drinking water taps.	UP DO response: We may collect further samples either at the repeat
				(3 repeat samples	locations and/or other locations to investigate the source of the problem.
				were required) The	to arresingute the source of the problem.
				other 2 were	Region 5 response: Region 5 does not recommend taking total coliform
				collected from	bacteria samples at hydrants because bacteria builds up in the stagnant
				hydrants. One repeat	water above the valve.
				sample was collected	
				from the site of 8/14	The sample PN sent with the 8/23/03 NOV letter says 4 of 10 samples
				TC+ (Post Office) as	collected in 8/03 were total coliform positive. It contains appropriate
				required and was	health affect information, and information on compromised populations.
				also TC+. On 8/20, a	It says a chlorine disinfectant was added as a precautionary measure.
				sample was collected	
	•			from the same 2 taps	During the EV, MDEQ informed the EV team that this system does not
				and from a hydrant.	normally chlorinate. It began chlorinating in response to the 8/03 MCL
				The Post office and	violation, and discontinued disinfection treatment in mid-2004.
				hydrant samples were	However, this system's samples continued to be shown as "Treated
				TC+. 3 repeat	Public Distribution" samples through 4/06 on the UP District Office's
				samples were	TCR compliance database printout. This could result in MDEQ
				collected on 8/21, but	providing incorrect instructions and example public notices to the
				none from the site of	system to respond to bacti MCL violations.
-				the original positive	, and the second
				(D) (O) (D)	The 8/23/03 NOV letter also says "mains were flushed to distribute
				(Post Office) as	chlorine disinfectant throughout the water system." and "We will inform
				required. A Post	you when our sampling shows that no bacteria are present. We
				Office sample was	anticipate resolving the problem within a few days."
				collected the next day	
				on 8/22. 10 more tap	The MDEQ UP District Office advised after the EV that once an MCL

and 6 more hydrant samples were collected between 8/24 and 8/28. All, including the 3 from the Post Office were ND. 9 of the 10 hydrant samples were ND. The 8/25 sample from a hydrant on Riley St. was TC+. ND samples were taken from this and 2 other hydrants on 8/27, and this hydrant and another hydrant on 8/28.

The 8/23/03 NOV requires the system to provide PN not later than 30 days after the system learns of the violation, and send MDEQ a signed/dated copy of the notice within 10 days after it is sent to customers. A sample PN is enclosed. A copy of a PN signed and dated by

violation has occurred, systems are either instructed to issue boil notice (or they do for them) or they begin chlorination (flush, etc. to get chlorine throughout the system within a few hours).

After the EV, UP District Office staff confirmed it notifies systems issued boil water notices because of acute bacti MCL violations or pressure loss not to lift the notices until they receive authorization from MDEQ, and advises them to notify their customers when the boil notice is lifted.

The example PNs MDEQ sends with NOV letters for monthly bacti MCL violations tells customers they will be notified when the system's sampling shows that no bacteria are present. However, during the EV, MDEQ informed the EV team that both systems that only disinfect after an MCL violation, and systems that normally disinfect which boost chlorination after an MCL violation do not send another notice to their customers, except to rescind boil water notices.

The example PN also says samples are being collected to monitor water quality and the system is conducting an investigation for the cause of problem.

Except for language included in the sample PNs that MDEQ sends with its NOV letters for MCL violations, there was generally no documentation in the files of MDEQ's instructions to the systems regarding conducting an investigation, disinfecting the system, and collecting check samples. There was no documentation in these files of MDEQ notifying the systems that the MCL violations had been resolved.

It appears that the 8/28/03 SOX entered into S/F for this violation is based on ND check samples taken on 8/28/03.

MDEQ staff indicated that there is no set policy for the number of consecutive ND bacti samples (and how many hours between samples)

	the system is not in the file.	that must be obtained to check the success of disinfection for systems that do not normally disinfect, or systems that boost disinfection.
		UP DO response: They collect a distribution sample(s) - have already verified the presence of chlorine - as advised by the district engineer. The sample(s) are used to show the system is back in compliance.
		It appears that MDEQ does not instruct systems that do not normally disinfect to flush all disinfectant residual from the system before collecting samples to check the success of disinfection. DEQ should not count special purpose samples taken to check the success of disinfection following an MCL violation at systems that do not normally disinfect if disinfectant residual is present in the samples.
		During the EV, MDEQ staff also advised that it instructs systems that have a monthly MCL violation to begin taking routine samples early during next month after chlorine levels have dissipated.
		UP DO response: Operators are advised what level chlorine residual to obtain at the far ends of the system and they adjust the amount of chlorine fed to the system accordingly. They all use test kits to monitor the chlorine levels; they verify the chlorine has dissipated prior to sampling following chlorination in response to an MCL violation.
		MDEQ staff also advised during the EV it is their understanding from MDEQ CWD that when CWS taking 5 routine samples required the month following a positive sample or MCL violation have an (another) MCL violation based on the first and second samples, the remaining routine samples that are taken after chlorination starts can be counted to clear the MCL violation even though there is still chlorine in the system. The UP District Office uses the date of these ND samples for the SOX and at Links to the MCL violation in S/E
	·	MCL violation based on the first and second samples, the rer routine samples that are taken after chlorination starts can be clear the MCL violation even though there is still chlorine in

MI0000550	Iron River Township- Beechwood	CWS/ 440	10/05 TCR month- ly MCL	Yes 11/4/05 NOV requires the system to provide PN not later than 30 days after the system learns of the violation, and send MDEQ a signed/dated copy of the notice within 10 days after it is sent to customers. A sample PN is enclosed. A copy of a PN signed and dated by the system is not in the file.	After the EV, CDWU staff advised the UP District Office is apparently confusing special purpose sampling to check the success of disinfection following an MCL violation with routine sampling which is suspended when an MCL violation occurs until it is resolved. CDWU staff concurred that the "check" samples used to clear the MCL violation should not be taken until chlorine residual is absent from the system for systems that do not normally chlorinate. The TCR compliance database printouts provided to the EV team do not provide information on sample collection time. The 11/4/05 NOV for the 10/05 MCL violation requires the system to take 5 routine samples during 12/05. The system collected these in early 12/05. 11/4/05 NOV requires PN by mail or hand delivery to each customer receiving a water bill and other customers such as renters to which water is delivered. It also says, in addition, the system may use any other contact method reasonably calculated to reach others regularly served such as those who do not pay water bills or do not have a service connection address (e.g., tenants, nursing homes patients, prison inmates). It requires the system to provide PN not later than 30 days after the system learns of the violation, and send MDEQ a signed/dated copy of the notice within 10 days after it is sent to customers. A sample PN is enclosed. It says if system posts the notice (as a supplemental method), it must do so for at least 7 days and as long as the violations persists. MDEQ entered an 11/15/05 state PN received (SIF) date for the 10/05 MCL violation in S/F, but a copy of a PN signed and dated by the system is not in the file. The example PN sent with the 11/4/05 NOV says the 10/05 routine sample and 1 of the 4 repeat samples were TC+, and system was
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	conducting an investigation as to the possible cause of the problem, which may originate in the storage tank. It says flushing and sampling will continue to ensure the disinfectant is present throughout the system. It also says the system will inform customers when sampling shows that no bacteria are present, and anticipates resolving the problem within a few days.
	However, based on a review of the sample report database printout for this system provided by MDEQ during the EV, and discussion with MDEQ staff, it appears that this MCL violation was caused by 2 TC+ 10/29/05 samples. MDEQ staff checked the hard copy results for these and the 2 other samples taken on 10/29 and all 4 were marked as repeat samples.
	UP DO response: There was an error in the bacti database entry-the 10/27/05 bacti sample was POS (not ND as entered in the db) therefore the 4 samples on 10/29/05 were the repeats. MCL occurred as 2 of the 4 repeats 10/29/05 were POS. We did not have them do repeats of repeats.
	No repeats samples were taken following the 10/14/04 TC+ routine sample, and 5 routine samples were not taken in 11/04. A major repeat M/R violation for 10/04 and a major routine M/R violation for 11/04 should have been entered into S/F. There is no documentation in the file that MDEQ instructed the system to collect repeat samples for the 10/14/04 TC+, or to take 5 routine samples during 11/04, or sent an NOV for these violations.
·.	UP DO response: We believe this 10/14/04 POS entry in the database is an error. We have no record of correspondence related to this POS, however those bacti hardcopies are gone (we keep 2 years worth here in office).

There is an 11/24/04 "Contaminated Water Sample" letter for a TC+ 11/22/04 routine sample in the file which tells the system to take 4 repeat samples within 24 hours and at least 5 routine samples in 12/04. There is an 11/29/04 NOV letter for an 11/04 MCL violation in the file which says the 11/22/04 TC+ routine and 1 of 4 repeat samples were TC+. It requires the system to provide PN to its customers, send MDEQ a signed/dated copy, and take 5 routines samples during 12/04. The sample PN sent with the NOV letter says "A chlorine residual was added to the system, as a precautionary measure, as soon as we were aware of the potential problem. The mains were flushed to distribute the chlorine residual thruout the system. Samples are being collected to monitor water quality. We are currently chlorinating the system and will continue to do so for the immediate future. We are conducting an investigation as to the possible cause of the problem. Flushing and sampling of the system will continue to ensure that disinfectant is present thruout the system. We will inform you when our sampling shows that no bacteria are present. We anticipate resolving the problem within a few days." The 11/04 MCL violation was not reported to S/F.
present thruout the system. We will inform you when our sampling shows that no bacteria are present. We anticipate resolving the problem within a few days."
A copy of a PN signed and dated by the system is not in the file. The system took 5 routine samples the next month in 12/04. Based on the lack of sample results until 12/13, it appears that the system may not have disinfected the system following the 11/04 MCL violation, and obtained a set of ND check samples.

There is a 12/15/04 "Positive Bacti Report for Construction/Repair" in the file which says MDEQ received a TC+ bacti result for a sample taken at the water tank and that the disinfection procedure needs to be repeated and additional samples collected. It says the MI SDWA requires prior to placing a water main in service, not less than 2 consecutive bacti samples be collected 24 hrs. apart, and each analysis be ND.
There is a 12/22/04 "Contaminated Water Sample" letter in the file for a 12/15/04 TC+ and 1 of 4 repeat samples taken over the weekend which was also TC+ which requires the system to take a minimum of 5 routine samples during 1/05. It says a separate letter will be issued for the 12/04 MCL violation. This NOV letter, also dated 12/22/04 is also in the file. The NOV letter requires the system to provide PN to its customers, send MDEQ a signed/dated copy, and take 5 routines samples during 1/05. The sample PN sent with the NOV letter provides information on what steps the system is taking which reads the same as the one sent with the 11/29/04 NOV letter for a 11/04 MCL violation (see above) except that it also says the cause of the problem may originate at the water tank.
The 12/04 MCL violation was not reported to S/F. The results of the repeat samples taken over the weekend were not on the database printout, and MDEQ staff could not locate the hard copy results for them during the EV.
A copy of a PN signed and dated by the system is not in the file. The system took 5 routine samples the next month in 1/05. Based on bacti sample results on the database printout for samples taken after the weekend of 12/18 and 12/19, it appears that the system may not have disinfected the system following the 12/04 MCL, and obtained a set of ND check samples. The only result for samples taken later in 12/04 is a single ND result for a 12/28/04 routine sample. The next

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	samples for which there are results are 5 routine samples, and 1 non-routine sample taken on 1/20/04.
	MDEQ advised during the EV that this system is having a lot of problem with Japanese beetles at the water tank.
	There is a 4/17/06 notice in the file which notifies customers the Iron River Township-Nash water system lost pressure on 4/17/06 and that contamination may have occurred, advises them to boil their water before using in the file. It explains that these precautionary measures are being taken due to the loss of pressure in the water distribution system caused by a failure in the well pump motor control system on 4/17, and whenever a water system losses pressure for any significant length of time, precautionary measures are recommended. The notice says township staff manually restored pump operations and system pressure has been restored. It says that water staff will be taking other remedial actions such as disinfecting the water system with chlorine, flushing, and collecting bacti samples from around the system, and anticipate that the problem will be resolved within 24 hours. It says township staff will inform customers when tests show no bacteria and you no longer need to boil your water.
	UP DO response: Beechwood was not affected. The systems, Beechwood, Nash and Ryden, are interconnected however they are routinely operated as separate systems- Interconnections closed.Beechwood was not affected.
	MDEQ staff advised that it notifies systems issued boil water notices because of acute bacti MCL violations or pressure loss not to lift the notices until they receive authorization from MDEQ, and advises them to notify their customers when the boil notice is lifted. MDEQ entered a 1/1/91-6/30/94 sanitary survey violation for this system. It also appears that it should have entered a sanitary survey

Appendix B
Community Water System Program System Specific Findings

					violation for 7/1/99-6/30/1999. (before EV review period).
MI0003400	Iron Mountain	CWS/ 8,525	4/05 TCR month- ly MCL	No-There is no documentation that the system boosted disinfection and collected consecutive ND check samples. 4/11/05 NOV letter requires system to provide PN not later than 30 days after the system learns of the violation, and send MDEQ a signed/dated copy of the notice within 10 days after it is sent to customers. A copy of a PN signed and dated by the system is not in the file.	System was sent 4/8/05 repeat reminder letter following the 4/5/05 TC+ routine sample. The example PN sent with the 4/11/05 NOV letter identifies the TC+ routine and repeat samples that caused the violation, and says "A chlorine residual was added to the system, as a precautionary measure, as soon as we were aware of the potential problem. The mains were flushed to distribute the chlorine residual thruout the system. Samples are being collected to monitor water quality. We are currently chlorinating the system and will continue to do so for the immediate future. We are conducting an investigation as to the possible cause of the problem. Flushing and sampling of the system will continue to ensure that disinfectant is present thruout the system. We will inform you when our sampling shows that no bacteria are present. We anticipate resolving the problem within a few days." There's a copy of the system's newspaper PN faxed to MDEQ on 4/26 which reads the same as MDEQ's example PN except that it also says on 4/11/05 samples were taken throughout the system, and all were ND. It also says the water is safe to drink, and that boiling or other precautionary measures are not necessary. System was sent 11/15/05 repeat reminder letter following 2 TC+ routine samples taken on 11/9/05.
			11/05 TCR month- ly MCL	Yes-Based on results on the database printout of 2 ND check samples taken at the east side reservoir (515 Park Ave.) on 11/14/05	System took a total of 6 repeat samples on 11/13/05 including samples from the two addresses where TC+ routine samples were collected on 11/9. The example PN sent with the 11/15/05 NOV letter identifies the TC+ routine and repeat samples that caused the violation, and provides information on what steps the system is taking which reads the same as the one sent with the 11/29/04 NOV letter sent to Iron River Township-

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Community Water System Program System Specific Findings

MI0000660	Bessemer	CWS/	8/04	(system also took ND samples from wells 1, 2, 3, and 4 on this date.) 11/4/05 NOV letter requires system to provide PN not later than 30 days after the system learns of the violation, and send MDEQ a signed/dated copy of the notice within 10 days after it is sent to customers. A copy of the PN signed by the system on 11/28/05 is in the file. Yes	2/17/06 repeat reminder letter in file advises system its 2/13/06 routine sample at 1238 S. Carpenter St. was TC+, and instructs system to take 3 repeat samples within 24 hours. Per results on database printout, the system took 3 ND repeat samples on 2/16/06 including one at the address of the 2/13/06 routine positive sample. After MDEQ received the PN on 11/28/05 it notified the system that their PN notice was not legible and as a result does not comply with the requirement of the federal standards. It warns that if a legible notice is not provided within 30 days, a ruling will be requested from EPA. A response letter was received on 11/30/05 which says the system checked the approximately 250 post cards that were not yet mailed and found 4 that were somewhat illegible, and that it estimated there may been 50 cards in this condition. It says so far they received approximately 6 phone calls and they offered callers a full size copy of the PN. MDEQ is commended on checking the content of the PN notices it receives for MCL violations, and should continue to do so. System was sent 8/12/04 repeat reminder letter following the 8/9/04
MIOOOOO	Besseriei	2,272	TCR month- ly MCL	Based on the 8/16/05 SOX linked to the violation in S/F, it appears that the 3 samples taken on 8/17/04 were check samples that cleared the violation.) 8/26/04 NOV letter	TC+ routine sample "at Bluff Valley Reservoir. It instructs the system to collect 3 repeat samples, 1 from the positive location, and 2 additional samples downstream of the positive location. The 8/26/04 NOV letter for the 8/04 MCL violation requires the system to take 5 routine samples during 9/05. The system collected these on 9/14/04. The example PN sent with the 8/26/04 NOV letter says that 1 of the 8/04 routines samples and 2 of 3 repeat samples were TC+. It also says that a chlorine residual is routinely added to the system; and after the

Appendix B
Community Water System Program System Specific Findings

	requires system to provide PN not later than 30 days after the system learns of the violation, and send MDEQ a signed/dated copy of the notice within 10 days after it is sent to customers. A copy of the PN signed by the system on 9/11/04 is in the file.	condition of the storage reservoir was checked it was partially drained and refilled with water that had additional disinfectant, and samples are being collected to monitor water quality. It also provides information on what steps the system is taking which reads the same as the one sent with the 11/29/04 NOV letter sent to Iron River Township-Beechwood for its 11/04 MCL violation (see above).
10/05 TCR M/R	Yes-except that the NOV should have warned the system it would be issued a \$200 civil fine if it had another bacti M/R violations within a 12-month period. The 11/4/05 NOV letter requires system to issue public notice not later than 1 year after learning of the violation. It encloses a sample PN, and directs the system to send MDEQ a signed	This violation should have been entered into S/F as a TCR minor M/R (type 24) violation since the system collected 4 of the 5 required samples.

and dated copy of the notice that it posts within 10 of posting the PN.	· ·
A copy of a PN signed and dated by the system was not in the file.	

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Appendix C Delta-Menominee DHD

EV Summary Findings, Region 5 Commendations and Recommendations, and System Specific Findings

TCR MCL Violation Follow-Up

The audit team reviewed follow-up for 1TCR MCL violations at Camp 7 Campground (MI2120079). The audit team found the DHD followed its procedures for this violation.

However, the following problems were noted:

DHD should have charged system with a TCR minor repeat M/R violation because it did not collect all 4 repeat samples on the same day following the 5/10/05 TC + routine sample.

Also, the 5/31/05 NOV letter doesn't instruct the system to send back a sign/dated copy of one of the enclosed PNs. However, a signed/dated copy of PN returned from system is in the file. **LHD response**: This is correct, the MCL letter did not contain this. It is now corrected in our form letters.

DHD should have required system to take 5 routine samples in May of 2005 at the Well #4 system after it re-opened for the season because the 8/23/04 routine sample for well # 4 system was TC positive (TC+). DHD's 8/27/04 letter told the system it had to take 4 repeat samples within 24 hours from the well #4 hand pump because of the 8/23/07 TC+ sample. However, an 8/30/04 DHD memo to the file states that the system called to inform DHD that well #4 was taken out of service for the rest of the season and that the well will be tested in the spring. The system did not collect any repeat samples. **LHD response:** Well number 4 is plugged. Number 7 and 8 are the only active Camp 7 wells. Because it was closed for winter, we used our reopening procedures, which required two samples 8 hours apart. There was a memo stating they called to say their season was over so they did not take the follow up samples.

The audit team made the following additional observations:

The NOV provides thorough instructions to the system regarding its options. It allows limited use of a water supply on a temporary basis (not to exceed 90 days) with appropriate PN and precautionary measures to protect public while system investigates and resolves the problem. The system must provide bottled water from licensed commercial source, or hauled water (that meets the conditions listed), post notices at water outlets and disconnect all drinking fountains, ice machines and beverage machines from the water system.

The 5/16/05 "advisory letter from DHD" to take repeat samples referenced in the LHD's 5/31/05 NOV letter for the May 2005 TCR MCL is not in the file.

DHD's 9/20/05 letter confirms that system's 5 routine samples were all ND, and that it may resume its normal sampling schedule. It also notifies system that if Camp 7 water supplies are open at any point during 2005 CYQ 4, a TCR sample from each well in use must be submitted.

Following the 9/8/05 TC+ routine sample at Cedar River Plaza, DHD sent 10/6/05 letter telling system to take 4 repeat samples within 24 hours, one from the same tap as the original positive, one from the raw water tap, and that the other two may be taken from other location in the distribution system. DHD 10/6/05 letter to system recounts that the system was notified by phone on 9/30/05, and by 10/3/05 letter to take 4 repeat samples, and the system collected 4 ND samples on 10/3/05; and tells system it must collect 5 routine samples in November 2005. After the system eventually collected 5 routines in December 2005, DHD sent 1/6/06 letter confirming that system collected 5 ND routines and notifies system that it may return to its normal water sampling schedule.

M/R Violation Follow Up

The audit team reviewed follow-up for 16 M/R violations (6 TCR, 3 nitrate, 1 nitrite, 3 LCR initial tap, 1 IOC, 1 VOC, and 1 SOC). The audit team found the DHD generally followed its procedures for 5 violations (2 TCR, 2 LCR initial tap, and 1 nitrate). The team found the following problems with the other 11 cases:

DHD should have sent the US Forest Service-Admin. a monitoring reminder and \$200 fine warning notice 30-90 days before the end of the compliance period (CP), assessed a \$200 fine for failure to sample by the end of the CP, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be assessed a \$400 fine if it fails to sample by this date for the 1999-2004 SOC M/R, 1999-2004 VOC M/R, 2002-2004 IOC M/R, and 2002-2004 Nitrite M/R violations. The DHD should have issued the system a fine for its 1-6/05 LCR M/R violation because this was the second LCR M/R violation within 12-months.

The DHD should have sent Cedar River Plaza a R/FW notice 30 - 90 days before the end of the 2004 annual nitrate CP, issued a \$200 fine for failure to sample during 2004, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be assessed a \$400 fine if it fails to sample by this date. After the EV, DHD responded that the system was inactive during this period. However, it does not appear DHD was aware that the system was closed, because it continued to issue it NOVs.

A \$200 fine should have been issued to Cedar River Plaza after the 4-6/04 TCR M/R violation because the system also did not sample for TCR during the 4th quarter of 2003.

A \$400 fine instead of a \$200 fine should have been issued to Cedar River Plaza after the 7-9/04 TCR M/R violation because this was at least its 3rd quarterly TCR M/R violation within 12 months. The DHD advised us that it has been basing its civil fines on violations during calendar years (CYs) rather than the previous 12-month period as required by the MDEQ's administrative fine policy and procedures.

A \$200 fine should have been issued to Cedar River Plaza after the 4-6/05 TCR M/R violation because it was the system's 2^{nd} quarterly TCR M/R violation within 12 months.

At least a \$200 fine should have been issued to Cedar River Plaza after the November 2005 TCR M/R violation because it also had incurred M/R violations for 2005 CYQ 2, and July and August 2005 within the last 12-months.

The audit team made the following additional observations:

The NOVs for the M/R violations say the failure to collect these samples may result in a DHD staff taking the samples and billing the system \$33.00 dollars plus laboratory fees. However, no instances were noted where DHD did this, even for Cedar River Plaza which failed to sample during 2003 CYQ4, 2004 CYQ 2 and 3, and 2005 CYQ 2. After the EV, DHD responded that the system was inactive during this period. However, it does not appear DHD was aware that the system was closed, because it continued to issue it NOVs.

These NOVs also say failure to comply with the requirements of the MI SDWA may result in the assessment of a \$200 fine imposed and collected directly by the State of Michigan. These NOV letters should be changed to say that DHD, instead of the State of Michigan, may impose fines for failure to comply. After the EV, DHD responded that it will change this in the letters.

NOVs for TCR and chemical M/R violations provide information on where systems can obtain sampling bottles.

DHD should have required the Menominee County Road Commission to sample for the 2nd, 3rd, and 4th quarters of 2005 to determine if the system exceeded the MCL for methylene chloride following the 12/7/05 1.6 ug/l sample. A 3/15/05 letter in the file notifies system that as a result of the VOC confirmation sample collected on 2/25/05 testing ND for all analytes, the MCL violation for methylene chloride detected at 11.6 ug/l in the 2/7/05 sample was not confirmed. It advises system that, because of the elevated levels of methylene chloride and tetrachloroethylene found in the 2/7/05 sample, it must monitor annually for VOCs until the system has established a consistent sampling history, and that its next monitoring period for VOCs will be 1/1/06-12/31/06. After the EV, DHD responded that they consulted MDEQ, the system re-sampled and levels were okay; and that they continued annual sampling which was over and above recommendation by MDEQ. (This problem may stem from an outdated MDEQ flow chart that may need to be revised to reflect current regulatory requirements.)

MDEQ/ DHD should not reduce SOC monitoring frequency to once every 6 years. State regulations only allow reduced monitoring to one sample every 3 year CP for systems serving less than or equal to 3,300 persons, [state rule 717(7)], and two samples every 3 year CP for systems serving more than 3,300 persons [state rule 717(6)]; or submission of a waiver application [state rule 717(8)]. MDEQ's sampling protocol for NTNCWSs has evolved into sampling for SOCs every 6 years, which does not follow State or Federal regulations. State rule 717(8) states: "Each community and nontransient water supply may apply to the department for a waiver from the requirements of subrule (5), (6), or (7) of this rule. A supplier shall reapply for a waiver for each compliance period." (MDEQ advised R5 it will explore the possibility of incorporating the waiver request into the reminder notice for SOC sampling, whereby

successfully collecting a sample within the first three years of a CP allows waiving the sampling requirement for the next three year period, assuming analytical results are below detection limits for all analytes.)

MDEQ needs to clarify the procedures for semi-annual TCR, L/C, etc. monitoring at NCWSs under MDEQ's administrative fine policy and procedures. MDEQ's policy and procedures for administrative fines for M/R violations prescribes different procedures for sampling events required once per year or less frequently, and for sampling events required more frequently than once per year. Semi-annual monitoring would fall under the procedures for sampling events required once per year or less frequently. However, the "Civil Fines for Failure to Monitor" flow chart that MDEQ included in the package of information for implementation of administrative fines sent to LHDs in July 1997 suggests that semi-annual monitoring should be handled under the procedures for sampling events required more frequently than once per. The footnote for the "No sample/End of Monitoring period=Issue \$200 fine" step of the flow chart reads: "For quarterly or more frequent monitoring only, a written warning (in lieu of first fine) is issued with PN and FRDS. (MDEQ advised R5 it agrees that neither document specifically addresses which fines procedure should be used with cases of missed 6-month monitoring schedules. Either approach, warning after the first M/R violation or fining after the first M/R violation, is admissible under the Michigan Safe Drinking Water Act (SDWA), PA 399, 1976. It can be left to the judgment of the LHD as to which approach is most appropriate in a given situation.)

The LHD appears to exceed the authority of MDEQ's administrative fine policy and procedures by issuing warnings and/or fines for missing a new sampling deadline set for a system on quarterly TCR monitoring before the end of the next quarter. **LHD response:** Our T2 Corrective Action Plan is based on this and was okayed by DEQ. (MDEQ advised R5 that the Michigan Safe Drinking Water Act (SDWA), Rule 325.1007 (2) (a), states, merely, the Department may impose a \$200 fine for failure to collect a water sample under this act. "Under this act," of course, includes the rule(s) where the Department can establish any monitoring requirement at least as stringent as the minimum requirements established in the Act. Relative to this, the Fines Policy offers further guidance for administering fines. Issuing a fine after the first quarterly monitoring violation or after a missed deadline established prior to the end of a quarter may not be included in the Fines Policy, but it does not exceed the authority of the SDWA.)

The audit team noted the following file documentation problems:

There are NOVs in the US Forest Service-Admin. file for TCR semi-annual M/R violations for the both halves of 2004 and the 1st half of 2005, but these violations have not been entered into SDWIS/FED. The system was assessed a \$200 civil fine for the 1st half of 2005 violation, and a copy of the PN sent to the system for this violation signed and dated (7/19/05) by the system is in the file. However, there is a ND TCR result for each of these monitoring periods in WaterTrack. After the EV, DHD responded that the fine was rescinded because of laboratory error - a sample was collected on 5/17/05 but the lab did not forward the results. **R5 response:** The rescission of the fine and NOVs are not documented in the file.

The 1/13/03 NOV issued to Menominee County Road Commission for its 2002 annual nitrate M/R violation sets a new sample deadline of 1/31/03, and warns that failure to sample by this date may result in DHD collecting it and charging system \$35 plus lab fees, and in MDEQ imposing and collecting a \$200 fine. It instructs the system to sign and post attached PN until DHD receives the sample result, and send back a copy of the signed PN. This violation is not in SDWIS/FED. However, there is an 11/13/02 nitrate sample result in WaterTrack. After the EV, DHD responded that they received a copy of this sample result on 1/14/03 and rescinded the NOV. **R5 response:** The rescission of the NOV is not documented in the file. The violations should be deleted in SDWIS/FED.

After the EV, DHD advised us that when warranted, reminder letters are sent, however they were not being copied to the files, and this has been corrected and files will contain in the future.

There were NOVs in the file for all 16 M/R violations. 15 of the NOVs required the system to PN, and 14 enclosed an example PN for the system to use, and 10 required the system to send back a copy of the signed/dated PN it posted. The NOV letter for Cedar River Plaza's August 2005 TCR M/R violation does not require the system to PN for the violation. The NOV/civil fine letter for Cedar River Plaza's 1st half of 2005 LCR initial tap M/R violation, and the NOV letters for Cedar River Plaza's 7-9/04, July 2005, and August 2005 TCR M/R violation, do not instruct the systems to send back a signed/dated copy of the PN they post. The NOV letter for Cedar River Plaza's 7-9/04 TCR M/R also does not enclose a PN for the system to use.

Lead Action Level Exceedance Follow-Up

The audit team reviewed follow-up for 2 lead action level exceedances at Menominee County Road Commission. The audit team found the DHD generally followed its procedures for these action level exceedances.

A 2/2/05 letter requires system to provide PE information to all persons served by the water system, and post all drinking water fixtures within 60 days (a sample public education sheet with an abbreviated version of the mandatory language is enclosed for the system to use. It instructs system to return a singed/dated copy of the PE notice. There is no documentation that the system delivered this PE in the file. However, after the system collected a set of 5 L/C samples on 2/8/05 for the 1st half/05 CP that were below the lead action level, it was no longer required to provide PE. A 10/25/05 letter has the same PE requirements as the 2/2/05 letter. However, the enclosed sample public information sheet for system to use is in the form of a "Do Not Drink the Water" advisory notice which says the water may not be used for drinking or food preparation purposes, and a supply of drinking water that meet standards is being made available during this period. While it does not contain mandatory language on steps to reduce exposure to lead in drinking water, and on other sources of lead besides drinking water, it is acceptable since another acceptable source of drinking water is being made available. A copy of the PE signed by the system and dated 11/7/05 is in the file.

The system collected 2 source water L/C samples from the pressure tank on 12/13/04. The 2/2/05 letter tells the system to submit a proposal for one of 4 corrective action options by

6/30/05. The system apparently opted for the "Replace fixtures/sample replaced fixtures for two consecutive 6-month monitoring periods with results below action level round."

System collected 5 L/C samples for the 1st half/05 CP on 2/8/05 that were below the lead action level. However, the 10/25/05 letter sent after the system's 2nd half/05 samples exceeded the lead action says the system has stated that the water supply line outside the lunch room which produced water high in lead has been capped, but it must provide written documentation of the changes to the system by 11/12/05. A picture of the disconnected sink was in the file.

The letter also tells the system it must continue to sample for lead and copper every six months, and the next monitoring period is the 1st half of 2006. The system collected another set of 5 samples on 2/8/06 which were below the lead action level. The system replaced the sink outside the lunchroom which caused the action level exceedance the previous round with the south faucet for this round.

Enforcement Data in SDWIS

No discrepancies were noted.

Commendations and Recommendations

Commendations:

The DHD NOV letters for MCL violations provide thorough instructions to the system regarding its options, PN and precautionary measures it must provide while system investigates and resolves the problem.

The DHD provided good written and telephone instructions to systems following a routine positive sample regarding follow-up repeat and routine monitoring requirements and notified the systems when they could return to their normal sampling schedule. Also, the letter confirming that Camp 7 Campground collected 5 ND routine samples the month following a positive sample also advised if any Camp 7 water supplies are open at any point during 2005 CYQ 4, a TCR sample from each well in use must be collected.

MDEQ and the DHD are commended for requiring campgrounds with multiple wells to collect TCR samples at each well during each monitoring period. This is more stringent than the federal rule.

NOVs for TCR and chemical M/R violations provide information on where systems can obtain sampling bottles

Major Recommendations:

The DHD should issue systems that fail to collect all 4 TCR repeat samples on the same day following a positive routine sample with a minor repeat M/R (type 26) violation.

NOVs for TCR MCL violations should instruct systems to send back a sign/dated copy of one of the enclosed PNs. After the EV, the DHD advised us that this has been corrected in their form letters.

Fines for M/R violations should be based on the number of violations during the previous 12-month period, as required by MDEQ's administrative fine policy and procedures, rather than calendar years.

The DHD should issue monitoring reminder and \$200 fine warning notices 30-90 days before the end of the CP for annual and less frequently scheduled monitoring. The DHD should issue \$200 fines to systems that fail to sample, set a new sample deadline (that is timely but gives the system sufficient time to complete the task), warn systems they will be assessed a \$400 fine they fail to sample by the new date, and issue \$400 fines to systems that fail to sample by the new date.

NOVs for M/R violations should say that failure to comply with the requirements of the MI SDWA may result in the assessment of a \$200 fine imposed and collected directly by the DHD, rather than the State of Michigan. After the EV, the DHD responded that it will change this in the letters.

All NOV letters for M/R violations issued by the DHD should require the system to provide PN for the violation(s), enclose an example PN for the system to use, and require the system to send back a copy of the signed/dated PN it posts.

A confirmation sample can be taken following a detection of a VOC that exceeds the MCL, but the two results must be averaged and the average used, and the system must monitor for the next 3 quarters. Compliance with the MCL is based on the running annual average of the quarterly results. Quarterly monitoring is also required following detection of a VOC below the MCL to determine if levels are reliably and consistently below the MCL. States only have the discretion to delete results of obvious sampling errors from the compliance determination.

Minor Recommendations:

The DHD should document TCR repeat monitoring reminder letters, and other monitoring reminder letters in the system files. After the EV, the DHD advised us that this has been corrected and files will contain them in the future.

The DHD should document rescissions of NOVs in file and delete invalid violations from SDWIS/FED.

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
MI2120079	Camp 7 Campground	TN/25	5/05 bacti monthly MCL	Discrepancies Yes. But PHDM should have charged system with a minor repeat violation because it did not collect all 4 repeat samples on the same day following the 5/10/05 TC + routine sample. Also, the 5/31/05 NOV letter doesn't instruct the system to send back a sign/dated copy of one of the enclosed PNs enclosed which the system is instructed to post at each functional water outlet. However, a signed/dated copy of PN returned from system is in the file. PHDM 8/9/05 letter states that the system	TCR MCL NOVs are very thorough and give systems the option of closing, using an approved alternate nearby water source, or using temporary precautionary measures (PMs) to protect public health. They allow limited use of a water supply on a temporary basis (not to exceed 90 days) with appropriate PN and PMs while system investigates and resolves the problem. The system must provide bottled water from licensed commercial source, or hauled water (that meets the conditions listed), post notices at water outlets and disconnect all drinking fountains, ice machines and beverage machines from the water system. It must conduct an investigation to determine the cause of the problem, and methods of correction using a water well contractor or licensed consultant. Based on the investigation it must develop a plan, submit a schedule detailing proposed corrective work and equipment needed to resolve the problem, and complete the corrective measures, disinfect the water system, pump supply to wasted until all chlorine is removed, obtain 2 consecutive chlorine-free non-detect (ND) bacti samples collected at least 8 hours apart, and notify department in writing. If the problem cannot be resolved, the well must be abandoned and sealed by a licensed well driller. To remain open, permanent water hauling is required for all users and a license must be obtained from MDEQ. A safe water supply must be constructed. PHDM's MCL NOVs don't ask the system to sign and date the PN and mail back to PHDM. **This is correct, the MCL letter did not contain this. It is now corrected in our form letters. This is referred to in a number of areas throughout this document and should not be a problem in the future.

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies deactivated the well	OTHER OBSERVATIONS AND COMMENTS PHDM should have required system to take 5 routine samples in May of
				after it received PHDM's 5/31/05 NOV for the MCL violation, and collected a ND follow-up sample on 8/2/05 and 8/3/05. It notifies the system that it can put the well back into service, and remove the PNs, and tells it must take 5 routine samples in 9/05.	2005 at the Well #4 system after it re-opened for the season because the 8/23/04 routine sample for well # 4 system was TC+. PHDM's 8/27/04 letter told system it had to take 4 repeat samples within 24 hours from the well #4 hand pump because of the 8/23 TC+ sample. However, an 8/30/04 PHDM memo to the file states that the system called to inform PHDM that well #4 was taken out of service for the rest of the season and that the well will be tested in the spring. The system did not collect any repeat samples. ** Well number 4 is plugged. Number 7 and 8 are the only active Camp 7 wells. Because it was closed for winter, we used our re-opening procedures, which required two samples 8 hours apart. There was a memo stating they called to say their season was over so they did not take the follow up samples. Documentation of the 5/16/05 "advisory letter from PHDM" to take repeat samples referenced in the LHD's 5/31/05 NOV letter for the 5/05 TCR MCL is not in the file. ** This is correct. Documentation was in the computer file, not the T2 file where it should have also been.
					Region 5 commends PHDM for also sending 9/20/05 letter which confirms that system's 5 routine samples were all ND, and that it may resume its normal sampling schedule. It also notifies system that if Camp 7 water supplies are open at any point during CQ4/05, a bacti sample from each well in use must be submitted.
MI2120179	US Forest Service- Admin.	NT/60	1999-2004 SOC M/R	No- PHDM should have sent the system a sample reminder and \$200 fine	MDEQ/PHDM should not reduce SOC monitoring frequency to once every 6 years. State regulations only allow reduced monitoring to one sample every 3 year CP for systems serving less than or equal to 3,300 persons, [state rule 717(7)], and two samples every 3 year CP for

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER ODGERNATIONS AND
ID	NAME	Type/Pop.	Violations		OTHER OBSERVATIONS AND COMMENTS
	1.7711711	Турс/Тор.		Flow Chart?/	
				Discrepancies	
				warning (R/FW)	systems serving more than 3,300 persons [state rule 717(6)]; or
				notice approximately	submission of a waiver application [state rule 717(8)]. MDEQ's
				30 before the end of	sampling protocol for NTNCWSs has evolved into sampling for SOCs
				the compliance	every 6 years, which does not follow State or Federal regulations. State
				period (CP), assessed	rule 717(8) states: "Each community and nontransient water supply
				a \$200 fine for failure	may apply to the department for a waiver from the requirements of
				to sample by the end	subrule (5), (6), or (7) of this rule. A supplier shall reapply for a waiver
				of the CP, and set a	for each compliance period."
				new sample deadline	**DEQ documents state this is okay. MDEQ's 4/17 response:
				(that is timely but	MDEQ will explore the possibility of incorporating the waiver request
				gives the system	into the reminder notice for SOC sampling, whereby successfully
				sufficient time to	collecting a sample within the first three years of a compliance period
				complete the task),	allows waiving the sampling requirement for the next three year period,
				and warned system it	assuming analytical results are below detection limits for all analytes.
				will be assessed a	
				\$400 fine if it fails to	The NOVs for the M/R violations say the failure to collect these
				sample by this date.	samples may result in a PHDM staff taking the samples and billing the
				**This ties to	system \$33.00 dollars plus laboratory fees. However, no instances were
				reducing frequency	noted where PHDM did this, even for Cedar River Plaza which failed to
				of SOCs. Note:	sample during CQ4/03, CQ2 and 3/04, and CQ2/05. **They were
				When warranted,	inactive during this period. Not a true MV. R5 response: There was no
				reminder letters are	documentation in the Cedar River Plaza (see below) that it was closed.
				sent, however they	and it appears PHDM was not aware the system was closed at the time
				were not being	because it continued to issue it NOVs.
				copied to the files.	
				This has been	These NOVs also say failure to comply with the requirements of the MI
				corrected and files	SDWA may result in the assessment of a \$200 fine imposed and
				will contain in the	collected directly by the State of Michigan. These NOV letters should

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/ Disgrepancies	OTHER OBSERVATIONS AND COMMENTS
			1999-2004 VOC M/R 2002-2004 IOC M/R 2002-2004 Nitrite M/R 2004 Nitrate	future. NOV letter instructs system to sign and post attached PN until the sample result is received by PHDM, and to send PHDM a copy of the signed PN. But a copy signed by the system is not in the file. No-See above comment No-See above comment No-See above comment	be changed to say that PHDM, instead of the State of Michigan, may impose fines for failure to comply. **We will change this in the letters. *MDEQ needs to clarify the procedures for semi-annual bacti, L/C, etc. monitoring at NCWSs under the state civil fine policy. MDEQ's policy and procedures for administrative fines for M/R violations prescribes different procedures for sampling events required once per year or less frequently, and for sampling events required more frequently than once per year. Semi-annual monitoring would fall under the procedures for sampling events required once per year or less frequently. However, the "Civil Fines for Failure to Monitor" flow chart that MDEQ included in the package of information for implementation of civil fines sent to LHDs in 7/97 suggests that semi-annual monitoring should be handled under the procedures for sampling events required more frequently than once per. The footnote for the "No sample/End of Monitoring period=Issue \$200 fine" step of the flow chart reads: "For quarterly or more frequent monitoring only, a written warning (in lieu of first fine) is issued with public notice and FRDS." MDEQ's response of 4/17: MDEQ agrees that neither document specifically addresses which fines procedure should be used with cases of missed 6-month monitoring schedules. Either approach, warning after the first M/R violation or fining after the first M/R violation, is admissible under the Michigan Safe Drinking Water Act (SDWA), PA 399, 1976. It can be left to the judgment of the LHD as to which approach is most appropriate in a given situation.
			M/R 7-12/03	Yes*	There are NOVs in the file for bacti semi-annual M/R violations for the both halves of 2004 and the 1 st half of 2005, but these violations have

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
			LCR M/R	1/27/04 NOV tells system to post the PN for a minimum of 7 days until L/C samples are taken, but does not tell system to send back a signed copy of the PN	not been entered into S/F. The system was assessed a \$200 civil fine for the 1 st half of 2005 violation, and a copy of the PN sent to the system for this violation signed and dated (7/19/05) by the system is in the file. However, there is a ND bacti result for each of these monitoring periods in WaterTrack. After the EV, PHDM responded that the fine was rescinded because of laboratory error - a sample was collected on 5/17/05 but the lab did not forward the results. R5 response: The rescission of the fine and NOVs are not documented in the file.
			7-12/04 LCR M/R 1-6/05 LCR M/R	Yes* No*-The LHD should have issued a fine. 7/27/05 NOV tells system to post the PN for a minimum of 7 days until L/C samples are taken, but does not tell	The 7/7/04, and 1/7/05 NOVs for the 1 st and 2 nd halves of 2004 bacti M/R violations, respectively, tells system to sign and post the attached PN until the sample result is received by PHDM, and send back a signed copy. However, the 8/3/05 NOV/civil fine letter for the 1 st half of 2005 violation does not tell the system to send back a copy of the PN. NOVs for bacti and chemical M/R violations provide information on where systems can obtain sampling bottles.
				system to send back a signed copy of the PN	
MI5520086	Menominee County Road Commission	NT/32	2 nd half/04 lead action level	Public Education (PE)-Yes-For 2 nd half/04 exceedance. 2/2/05 letter requires	3/15/05 letter in file that notifies system that as a result of the VOC confirmation sample collected on 2/25/05 testing ND for all analytes, the MCL violation for methylene chloride detected at 11.6 ug/l in the 2/7/05 sample was not confirmed. It advises system that, because of the

					OFFICE ORGERY ATIONS AND COMMENTS
SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/Pop.		Flow Chart?/	
					1 11 Is a functional chloride and tetrachloroethylene found in
			exceedance	system to provide PE information to all persons served by the water system, and post all drinking water fixtures within 60 days (a sample public education sheet with an abbreviated version of the mandatory language is enclosed for the system to use. It instructs system to return a singed/dated copy of the PE notice. There is no documentation that the system delivered this PE in the file. However, after the system collected a set of 5 L/C samples on 2/8/05 for the 1st half/05 compliance	elevated levels of methylene chloride and tetrachloroethylene found in the 2/7/05 sample, it must monitor annually for VOCs until the system has established a consistent sampling history, and that its next monitoring period for VOCs will be 1/1/06-12/31/06. PHDM should have required the system to sample for the 2 nd , 3 rd , and 4 th quarters of 2005 to determine if the system exceeded the MCL. **MDEQ consulted, they resampled and levels were okay. We continued annual sampling which was over and above recommendation by MDEQ. R5 response: A confirmation sample can be taken, but the result must be averaged with the first sample result and the average used for the compliance determination. States only have the discretion to delete results of obvious sampling errors from the compliance determination. Quarterly monitoring was also needed to determine if tetrachloroethylene levels were reliably and consistently below the MCL. 1/13/03 NOV for 2002 annual nitrate M/R violation. Sets new sample deadline of 1/31/03, and warns system that failure to sample by this date may result in PHDM collecting it and charging system \$35 plus lab fees, and in MDEQ imposing and collecting a \$200 fine. Tells system to sign and post attached PN until PHDM receives the sample result, and send back a copy of the signed PN. This violation is not in S/F. However, there is an 11/13/02 nitrate sample result in WaterTrack. After the EV, PHDM responded that they received a copy of this sample result on 1/14/03 and rescinded the NOV. R5 response: The rescission of the NOV is not documented in the file. The violations should be deleted in
				period that were below the lead action	S/F. ^a
				below the lead action	

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
				Discrepancies	
				level, it was no	
				longer required to	
				provide PE.	
			2 nd half/05	PE-For 2 nd half/05	
			lead	exceedance-Yes	
			action	10/25/05 letter has	
			level	the same PE	
			exceedance	requirements as the	
				2/2/05 letter.	
			li.	However, the	
				enclosed sample	
				public information	
				sheet for system to	
				use is in the form of a	
				"Do Not Drink the	
				Water" advisory	
				notice which says the	
				water may not be	
				used for drinking or	
				food preparation	
				purposes, and a supply of drinking	
				water that meet	
				standards is being	
				made available	
				during this period.	
				While it does not	

					OTHER OBSERVATIONS AND COMMENTS
SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/Pop.		Flow Chart?/	
				Discrepancies	
				contain mandatory	
				language on steps to	
				reduce exposure to	
	:			lead in drinking	
				water, and on other	
				sources of lead	
				besides drinking	·
				water, it is acceptable	
				since another	
				acceptable source of	
		į		drinking water is	
			:	being made available.	
				Call - DE	
				A copy of the PE	
				signed by the system and dated 11/7/05 is	
				in the file.	
				in the me.	
				Source water	
				lead/copper mon. —	
				Yes – The system	
				collected 2 samples	
				from the pressure	
				tank on 12/13/04.	
				Optimal corrosion	
		.		control treatment	
				Yes-2/2/05 letter tells	
				the system to submit	

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS	
	NAME	Туре/гор.		Discrepancies		
				a proposal for one of 4 corrective action options by 6/30/05. The system apparently opted for the "Replace fixtures/sample replaced fixtures for two consecutive 6-month monitoring periods with results below action level round" but there is no written proposal from the system in the file.		
				System collected 5 L/C samples for the 1 st half/05 compliance period on 2/8/05 that were below the lead action level. However, the 10/25/05 letter sent after the system's 2 nd half/05 samples exceeded the lead action says the system has stated that the water supply line outside the lunch room which produced		

			<u> </u>		OTHER OBSERVATIONS AND COMMENTS
SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/Pop.		Flow Chart?/	
	1112112			Discrepancies	
				water high in lead has	
				been capped, but it	
				must provide written	
				documentation of the	
				changes to the system	
				by 11/12/05. A	
				picture of the disconnected sink	
				was in the file.	
				was in the ine.	
				The letter also tells	
				the system it must	
				continue to sample	
				for lead and copper	·
	1			every six months, and	
				the next monitoring	
				period is the 1 st half	
				of 2006. The system collected	
				another set of 5	
:				samples on 2/8/06	
				which were below the	·
				lead action level. The	
				system replaced the	
				sink outside the	
				lunchroom which	
				caused the action	
				level exceedance the	
				previous round with	
				the south faucet for this round.	
				As stated above the	
				As stated above the	

SYSTEM	SYSTEM	Crystores	37:-1-4:	Cu t t .: T ti	
ID ID	NAME	System Type/Per	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
	INAMIL	Type/Pop.		Flow Chart?/	
			<u> </u>	Discrepancies	
				system collected 2	
				samples from the pressure tank on	
				12/13/04.	
				12/13/04.	
		·		Water quality	
				parameter monitoring	
				These may be	
				postponed during the	
				initial treatment	
				study.	
MI5520143	Cedar River	TN/25	2004	No-1/10/05 NOV	**Then were inacting daily distributed in the state of th
	Plaza		Nitrate	issued but PHDM	**They were inactive during this period. Not a true MV. R5
			M/R	should have sent the	response: There was no documentation in the file that the system
			172.20	system a R/FW	was closed, and it appears PHDM was not aware the system was closed at the time because it continued to issue it NOVs.
				notice approximately	closed at the time because it continued to issue it NOVs.
				30 before the end of	
				the compliance	
				period (CP), issued a	
				\$200 fine for failure	
				to sample during	
				2004, and set a new	
				sample deadline (that	
				is timely but gives the	
				system sufficient time	
				to complete the task),	
				and warned system it	
				will be assessed a	

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/Pop.		Flow Chart?/	
	IVZXIVIL	1) po. 1 op.		Discrepancies	
				\$400 fine if it fails to	
				sample by this date.	
3		-		A copy of the PN	
	1			sent with the NOV	
				signed and sent back	
				by the system is not	
				in the file **This is	
				correct, the MCL	
	3			letter did not contain	
				this. It is now	
				corrected in our	
				form letters. This is	
				referred to in a	
				number of areas	
				throughout this	
				document and	•
				should not be a	
				problem in the	
				future. **Note:	
				When warranted,	
				reminder letters are	
				sent, however they	
			:	were not being	
				copied to the files.	
				This has been	
				corrected and files	
				will contain in the	
				future.	

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
			1/05 Nitrate M/R	Yes-2/7/05 NOV/civil fine letter and \$200 civil fine citation for failure to sample by 1/31/05 sample deadline set by the 1/10/05 NOV. It also tells system that it must sample and report results for nitrate before 2/28/05, or be subject to additional fines and enforcement.	
				However, it appears that the only fines that can be assessed for annual nitrate sampling are a \$200 fine if a system fails to sample by the end of the annual compliance period (CP), and a single \$400 fine if it also	

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
			4-6/04	fails to sample by a new deadline that is set for it to sample by. A copy of the PN sent with the NOV signed and sent back by the system is not in the file. No-7/7/04 NOV Should have issued a	**We have been basing fines on calendar years, not a rolling 12 month period. This needs to be clarified in DEQ's fine policy. R5 response :
			4-6/04 bacti M/R	\$200 fine because the system did not sample for bacti during the 4 th quarter of 2003. A copy of the PN sent with the NOV signed and sent back by the system is not	LHD has been basing its civil fines on violations during calendar year (CYs) rather than the previous 12-month period as stated by the State Civil Fines Policy.
			7-9/04 bacti M/R	in the file. No-10/11/04 NOV /\$200 civil fine Should have issued a \$400 fine because this was at least the 3rd quarterly bacti	**We have been basing fines on calendar years, not a rolling 12 month period. This needs to be clarified in DEQ's fine policy. R5 response: LHD has been basing its civil fines on violations during calendar years (CYs) rather than the previous 12-month period as stated by the State's Civil Fines Policy.

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/Pop.		Flow Chart?/	Table 1 Table
				Discrepancies	•
				M/R violation within	
				the last 12 months	
				The NOV tells the	
				system it is required	
				to make PN of the	
				violation, but does	
				not include a PN for	
				the system to use, or	
				instruct the system to	
				send back a signed	
				copy of PN it uses	
			4-6/05	No-7/6/05 NOV	
			bacti M/R	issued with no fine.	
				Should have issued a	
				\$200 fine because	
				this was the system's	
				2 nd quarterly bacti	
				M/R violation within	
				the last 12 months	
				A commodale DNI	
				A copy of the PN sent with the NOV	
				signed and sent back	
				by the system is not	
				in the file.	·
			7/05 bacti	Yes*-8/3/05 NOV	*The LUD
			M/R	with \$200 civil fine.	*The LHD appears to exceed the authority of the state civil fine policy
			141/10	The 8/3/05 NOV	by issuing warnings and/or fines for missing a new sampling deadline
	1			111C 0/3/03 NO V	set for a system on quarterly bacti monitoring before the end of the next

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				states the system is being fined for failing to sample by 7/31/05, the date that system was told it must sample by in the 7/6/05 NOV issued for the 2 nd quarter/05 M/R violation. This is earlier than issuing a fine of \$400 for a third quarterly violation as outlined in MDEQ's policy and procedures for administrative fines for M/R violations, and may have resulted from mistakenly applying the policy for sampling events that are required once per year or less to quarterly bacti sampling. The NOV instructs	quarter. **Our T2 Corrective Action Plan is based on this and was okayed by DEQ. MDEQ's 4/17/07 response: The Michigan Safe Drinking Water Act (SDWA), Rule 325.1007 (2) (a), states, merely, the Department may impose a \$200 fine for failure to collect a water sample under this act. "Under this act," of course, includes the rule(s) where the Department can establish any monitoring requirement at least as stringent as the minimum requirements established in the Act. Relative to this, the Fines Policy offers further guidance for administering fines. Issuing a fine after the first quarterly monitoring violation or after a missed deadline established prior to the end of a quarter may not be included in the Fines Policy, but it does not exceed the authority of the SDWA. R5 Recommendation: MDEQ's administrative fines policy and procedures should be updated to clarify it allows issuing warnings and/or fines for missing a new sampling deadline set for a system on quarterly TCR monitoring before the end of the next quarter.

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
	INZIVIL	Турелгор.		Discrepancies	
				the system to post the	
				attached PN until	
				PHDM informs them	·
				to remove it, or for a	
				minimum of 7 days,	
				if they already	
				collected the samples.	
	-			However, it does not	
				tell the system to	
				send back a signed copy of the PN it	
_				posts, and a copy	
				signed by the system	
				is not in the file.	
			Ę.	The NOV letter tells	
				the system it must	
				sample by 8/31/05	
			8/05 bacti	Yes*-9/19/05 NOV	
			M/R	with \$200 civil fine.	
				The 9/19/05 NOV	
				states that the system	
				is being fined for	·
				failing to sample by	
				8/31/05, the date that system was told it	·
				must sample by in the	
				8/3/05 NOV issued	
			<u> </u>	5/5/55 110 Y 1334cu	

SYSTEM ID	SYSTEM NAME	System Type/Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				for the 7/05 M/R violation. See comments regarding fine policy and PN for the previous violation. The NOV letter tells the system it must sample by 9/30/05	
			11/05 bacti M/R	No- The system should have been issued at least a \$200 fine because it had incurred M/R violations for CQ2/05, and July and August 2005 within the last 12-months. 12/4/05 PHDM "Water Sampling Status" letter to system recounts that the system was notified by PHDM's 10/6 letter that it was required to take 5 routine samples in	Good follow-up: Following the 9/8/05 TC+ routine sample, PHDM sent 10/3/05 letter telling system to take 4 repeat samples within 24 hours, one from the same tap as the original positive, one from the raw water tap, and that the other two may be taken from other location in the distribution system. PHDM 10/6 letter to system recounts that the system was notified by phone on 9/30, and by 10/3 letter to take 4 repeat samples, and the system collected 4 ND samples on 10/3; and tells system it must collect 5 routine samples in 11/05. After the system eventually collected 5 routines in 12/05, PHDM sent 1/6/06 letter confirming that system collected 5 ND routines and notifies system that it may return to its normal water sampling schedule.

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/Pop.		Flow Chart?/	
				Discrepancies	
			-	11/05, but did not	
				take them; and sets a	
				new deadline of	
				12/31/05 for the	
				system to take the	
				samples	
				PHDM should have	
				required the system	
				to PN for the	
				violation	·

^{**}LHD comments on the draft EV chart (in italics)

Appendix D Dickinson-Iron DHD

Summary of EV Findings and Region 5 Commendations and Recommendations

TCR MCL Violation Follow-Up

The audit team reviewed follow-up for 1 TCR MCL violations at Blind Duck Inn (MI2220035).

The audit team found the DHD did not follow its procedures for this violation. The following problems were found with this violation:

Results for the ND sample taken on 9/17/04 and 9/18/04 cited in the 9/20/04 letter advising system it can remove PN were not in WaterTrack. However, there were handwritten results from the West Iron County Wastewater Plant Lab for 2 ND 9/18/04 samples in the file. These sample results were entered into WaterTrack after the EV.

System was not instructed to collect 5 routine samples the next month following the violation.

System did not take any repeat samples at the raw water sample tap.

9/20/04 letter acknowledging receipt of results for ND samples and advising system it can remove PN. Both of the 9/18/04 samples were collected at 5:30 am from the kitchen sink. MDEQ procedures require these samples to be taken at least 8 hours apart.

NOV letters for TCR MCL violations should refer to positive "repeat" instead of positive "check" samples, and should also refer to the positive routine sample(s) that caused the violation. (MDEQ advised R5 that MDEQ agrees the various types of samples should be called by the appropriate name in order to avoid confusion.)

The system should have been placed on quarterly monitoring for at least one year following the 9/1/04 MCL violation according to the instructions for assigning total coliform monitoring frequencies and documenting monitoring reductions issued by the Chief, MDEQ, Water Supply Section, Noncommunity Unit to LHDs on 9/9/99.

The audit team noted the following file documentation problems:

9/16/04 NOV notifies system it is in violation based on positive samples taken on 9/13/04. However, the violation was actually caused by a positive routine sample taken on 9/8/04, followed by 1 of the 4 repeat samples taken on 9/13/04 testing TC+.

October 2004 major routine M/R violation for failure to collect 5 routine samples the month following a positive sample was not reported to SDWIS/FED. **LHD response:** Site visit conducted and problem resolved. Five samples waived in letter but official wavier not in file.

The audit team made the following additional observations:

The NOV places system on the following precautionary measures until 2 consecutive (chlorine free) ND samples taken at least 8 hours apart are obtained: 1-approved bottled and bagged ice shall be used for human consumption, 2-use bottled water for any food preparation,

3-post all water outlets with "Non-potable water, do not drink" (a sample PN is enclosed). It says precautionary measures are temporary 90 day maximum).

M/R Violation Follow Up

The audit team reviewed follow-up for 9 M/R violations (5 TCR, 2 nitrate, 1 VOC, and 1 SOC). The audit team found the DHD generally followed its procedures for 7 violations (4 TCR, 1 nitrate, 1 VOC, and 1 SOC). However, the DHD had not adopted MDEQ's administrative fine policy and procedures. The team found the following problems with the other 2 cases:

MDEQ/ DHD should not reduce SOC monitoring frequency to once every 6 years. State regulations only allow reduced monitoring to one sample every 3 year CP for systems serving less than or equal to 3,300 persons, [state rule 717(7)], and two samples every 3 year CP for systems serving more than 3,300 persons [state rule 717(6)]; or submission of a waiver application [state rule 717(8)]. MDEQ's sampling protocol for NTNCWSs has evolved into sampling for SOCs every 6 years, which does not follow State or Federal regulations. State rule 717(8) states: "Each community and nontransient water supply may apply to the department for a waiver from the requirements of subrule (5), (6), or (7) of this rule. A supplier shall reapply for a waiver for each compliance period." (MDEQ advised R5 it will explore the possibility of incorporating the waiver request into the reminder notice for SOC sampling, whereby successfully collecting a sample within the first three years of a CP allows waiving the sampling requirement for the next three year period, assuming analytical results are below detection limits for all analytes.)

The LHD's NOV letters for M/R violations says if samples are not collected within 7 days, the LHD will collect them and bill system \$35 plus lab fees. It also warns that the state can impose \$200 fines for the 1st, and \$400 for any additional missed samples in a 12-month period which would be collected directly by the state. However, it is R5's understanding that administrative fines are issued to NCWSs by LHDs that have adopted either the state's civil fine policy or its own fine policy that is at least as stringent as the state's. Please advise if this LHD has adopted the state's civil fine policy. **LHD response:** Local Health Department has revised M/R violation to eliminate sample collection by the local health department and will follow the state's civil fine policy.

Formal enforcement should have been taken against Lake Mary Park after the 2005 nitrate M/R violation because the system was a nitrate M/R SNC.

There was no documentation in the file of follow-up for Lake Mary Park's 2nd half/2005 TCR M/R violation. Formal enforcement should have been taken because the system was also a nitrate M/R SNC.

NOVs were in the files for 8 of the 9 M/R violations. After the EV, the LHD forwarded a copy of a 1/26/06 NOV for Lake Mary Park. However, the NOV was issued for the system's 2005 nitrate M/R violation but did not address its 2nd half/05 TCR M/R violations. All of the NOV letters required the system to PN, and enclosed an example PN for the system to use. However none of

the NOVs required the system to send back a copy of the signed/dated PN it posted, and none were in the files.

Enforcement Data in SDWIS/FED

1/26/06 violation notice (SIA) has been entered into SDWIS/FED for Lake Mary Park's 2nd half/2005 TCR M/R violation since the EV.

LHD response: Copy of NOV letter found in Lake Antoine Park, both parks with same contact person and address. Copy faxed.

R5 response: The NOV letter only covers the 2005 nitrate M/R violation. The 1/26/06 SIA entered for this violation should be deleted.

An inaccurate date of 4/7/04 was entered into SDWIS/FED for the 4/13/04 NOV issued to North Dickinson School's for its 1-3/04 TCR M/R violation.

Commendations and Recommendations

Commendations:

The DHD NOV letter for the MCL violation places the system on precautionary measures including approved bottled water and bagged ice for human consumption, bottled water for any food preparation, and posting all water outlets with "Non-potable water, do not drink" and limits operating under precautionary measures to 90 days.

Major Recommendations:

The DHD should not clear MCL violations unless the ND check samples are collected at least 8 hours apart.

DHD should place systems that have a TCR MCL violation on quarterly monitoring for at least one year per in accordance with state procedures.

The DHD should instruct systems that have a TCR MCL violation to collect 5 routine samples the next month following the violation.

The DHD should place a copy of official written waivers of the requirement to collect 5 routine samples the month following a positive sample in the system file, and document site visits in the system file.

The DHD should change NOVs for M/R violations to say that failure to comply with the requirements of the MI SDWA may result in the assessment of a \$200 fine imposed and

collected directly by the DHD, rather than the State of Michigan. After the EV, the DHD advised us it has

revised M/R violation to eliminate sample collection by the local health department and will follow the state's civil fine policy.

DHD should issue informal NOV letters for all M/R violations and escalate to formal NOVs and request informal hearing once a system becomes an M/R SNC. NOV letters issued for M/R violations should instruct systems to send back a copy of the signed/dated PN the system posted.

Minor Recommendations:

The DHD should issue a minor repeat M/R violation to systems that fail to collect a repeat sample from the raw water sample tap.

NOV letters for TCR MCL violations should cite the date of positive routine sample result in addition to the date of the positive repeat sample(s).

The DHD should only link an NOV (SIA code/date) to an M/R violation in SDWIS/FED if an NOV was issued to the system for that violation, and delete SIAs that should not have been entered into SDWIS/FED.

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
MI2220035 Blind Inn	Blind Duck Inn	TN/100	9/04 bacti monthly MCL	No - System was not instructed to collect 5 routine samples the next month following the violation. 9/15/04 repeat sample reminder notice.	NOV letters for bacti MCL violations should refer to positive "repeat" instead of positive "check" samples, and should also refer to the positive routine sample(s) that caused the violation. Unreported major routine M/R violation for 10/04 for failure to collect 5 routine samples the month following a positive sample. **Site visit conducted and problem resolved. Five samples waived in letter but official wavier not in file.
				9/16/04 NOV Notifies system it is in violation based on positive samples taken on 9/13. However, the violation was actually caused by a positive routine sample taken on 9/8, followed by 1 of the 4 repeat samples taken on 9/13 testing TC+. System did not take any repeat samples at the raw water sample tap. The NOV places	According to WaterTrack this system was on semi-annual bacti monitoring before and after the 9/04 MCL violation. The system should have been placed on quarterly monitoring for at least one year following the 9/1/04 MCL violation according to the instructions for assigning total coliform monitoring frequencies and documenting monitoring reductions issued by the Chief, MDEQ, Water Supply Section, Noncommunity Unit to LHDs on 9/9/99. Results for the ND sample taken on 9/17 and 9/18 cited in the 9/20 letter advising system it can remove PN were not in WaterTrack. However, there were handwritten results from the West Iron County Wastewater Plant Lab for 2 ND 9/18/04 samples in the file. These sample results were entered into WaterTrack after the EV. MDEQ 4/17/07 response: The transition to WaterTrack from T2 involved a long period, from Oct. 2003 to Apr. 2004, where LHDs had no access to a database and tracking system. After the arrival of WaterTrack, there was a large backlog of sample data entry for LHDs to address. DEQ believes most LHDs successfully addressed the backlog

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				system on the following PMs until 2 consecutive (chlorine free) ND samples taken at least 8 hrs. apart are obtained: 1-approved bottled and bagged ice shall be used for human consumption, 2-use bottled water for any food preparation, 3-post all water outlets with "Nonpotable water, do not drink" (a sample PN is enclosed). It says PMs are temporary	of sample data entry, and that there are no "data gaps" in the WaterChem database. There may be an occasional sample or group of samples missing from or misidentified in the database. It is part of the LHD's quarterly routine to identify and fix these problems before submitting their violation records for review by the DEQ.
		·		90 day maximum). Copy of PN signed by system is in file. 9/20 letter acknowledging receipt of results for ND sample taken on 9/17 and 9/18, and	

SYSTEM ID	SYSTEM NAME	System Type/	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
		Pop.		advising system it can remove PN.	
				Both of the 9/18/04 samples were collected at 5:30 am from the kitchen sink. MDEQ procedures require these samples to be taken at least 8 hours apart.	
MI2220076	Lake Mary Park	TN/25	2004 Nitrate M/R	Yes-But the LHD had not adopted the state civil fine policy. 1/15/05 NOV letter was issued for the 2004 nitrate M/R and the bacti semi-annual M/R violation for the 2 nd half of 2004. A copy of the PN	The LHD's NOV letters for M/R violations says if samples are not collected within 7 days, the LHD will collect them and bill system \$35 plus lab fees. It also warns that the state can impose \$200 fines for the 1 st , and \$400 for any additional missed samples in a 12-month period which would be collected directly by the state. However, it is R5's understanding that civil fines are issued to NCWSs by LHDs that have adopted either the state's civil fine policy or its own fine policy that is at least as stringent as the state's. Please advise if this LHD has adopted the state's civil fine policy. **Local Health Department has revised M/R violation to eliminate sample collection by the local health department and will follow the state's civil fine policy.
				system posted is not in the file.	The LHD's NOV letters for M/R violations requires systems to provide PN for the violations, and send back a copy of enclosed PN the system posts.
			2 nd half/2004 semi-annual	Yes-But the LHD had not adopted the state civil fine policy.	

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
		Top.	bacti M/R	Discrepancies 1/15/05 NOV letter	
				issued for this violation and the	
				bacti semi-annual M/R violation for the 2 nd half of 2004.	
				A copy of the PN	
			2005 27	system posted is not in the file.	
			2005 Nitrate M/R	No-Formal enforcement should	
				have been taken because the system was a nitrate M/R	
				SNC.	v
				No documentation of NOV in the file. R5	
				asked the MDEQ UP District Office to forward a copy of the	
				1/26/06 violation notice (SIA) entered	
				into S/F after the EV. The UP District	
				Office forwarded a copy of this NOV	

SYSTEM ID	SYSTEM NAME	System Type/	Violations	Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
		Pop.		Discrepancies letter issued for the violation.	
			2 nd half/2005 bacti M/R ^a	A copy of the PN system posted is not in the file. No - No documentation in the file. Formal enforcement should have been taken because the system was a nitrate	1/26/06 violation notice (SIA) has been entered into S/F since the EV. **Copy of NOV letter found in Lake Antoine Park, both parks with same contact person and address. Copy faxed. R5 response: The NOV letter only covers the 2005 nitrate M/R violation. The 1/26/06 SIA entered for this violation should be deleted.
MI2220046	North Dickinson School	NT/500	1999-2004 SOC M/R	M/R SNC Yes-But the LHD had not adopted the state civil fine policy. 1/20/05 NOV letter issued for this and 1999-2004 VOC M/R M/R violations. A copy of the PN system posted is not in the file.	MDEQ/PHDM should not reduce SOC monitoring frequency to once every 6 years. State regulations only allow reduced monitoring to one sample every 3 year CP for systems serving less than or equal to 3,300 persons, [state rule 717(7)], and two samples every 3 year CP for systems serving more than 3,300 persons [state rule 717(6)]; or submission of a waiver application [state rule 717(8)]. MDEQ's 4/17 response: MDEQ will explore the possibility of incorporating the waiver request into the reminder notice for SOC sampling, whereby successfully collecting a sample within the first three years of a compliance period allows waiving the sampling requirement for the next three year period, assuming analytical results are below detection limits for all analytes.
					No documentation in file for the 5/9/05 "state unresolved" (SO7) and

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
		Pop.		Discrepancies	
			1000		11/7/05 "state intentional no-action" (SO6) linked to these violations in S/F. **Samples collected for new supply on 12/10/1998. System approved for operation on 9/2/1999. Samples were credited to 1999-2005 sampling period.
			1999-2004 VOC M/R	Yes-But the LHD had not adopted the state civil fine policy. 1/20/05 NOV letter issued for this and 1999-2004 SOC M/R M/R violations. A copy of the PN system posted is not in the file.	No documentation in file for the 5/9/05 "state unresolved" (SO7) and 11/7 05 "state intentional no-action" (SO6) linked to these violations in S/F. Please explain. **Samples collected for new supply on 12/10/1998. System approved for operation on 9/2/1999. Samples were credited to 1999-2005 sampling period.
			1-3/04 bacti M/R	Yes-But the LHD had not adopted the state civil fine policy. System sampled on 4/5/04 4/13/04 NOV letter issued A copy of the PN system posted is not in the fil-	An inaccurate date of 4/7/04 was entered into S/F for the 4/13/04 NOV letter in the file.
			1-3/05 bacti	in the file.	
			1-3/03 Oacti	Yes-But the LHD had	

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
ID	TYPETYLE	Pop.		Discrepancies	
		1 0 0 0	M/R	not adopted the state	
				civil fine policy.	
				4/14/05 NOV letter	
				issued for this and	
				1999-2004 VOC M/R	
				M/R violations	
				A copy of the PN	
				system posted is not	
				in the file.	
			4-6/05 bacti	Yes-But the LHD had	
			M/R	not adopted the state	
	:			civil fine policy.	
				7/21/05 NOV letter	
		ļ		issued	
				A copy of the PN	
				system posted is not	
				in the file.	

^{**}LHD comments on the draft EV chart (in italics)

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Appendix E Western UP DHD

Summary of EV Findings and Region 5 Commendations and Recommendations

TCR MCL Violation Follow-Up

The audit team reviewed follow-up for 3 TCR MCL violations at 2 systems (2 acute MCL violations at Keweenaw Mountain Lodge, and 1 monthly MCL violation at Lac La Bell Lodge. The audit team found the DHD generally followed its procedures for 1 of the 2 acute MCL violations at Keweenaw Mountain Lodge. The following problems were found with these violations:

An NOV letter was not issued for the June 2004 TCR acute MCL violation at Keweenaw Mountain Lodge, and the system was not told to provide PN. 6/10/04 letter advises system that its 6/3/04 routine sample taken from the tap of Well # 1 was E. coli + and instructs it to collect 4 repeat samples. However, the letter fails to mention that the sample taken at the motel laundry the same day was TC+, and that the system had an MCL violation. A June 2004 acute MCL violation was entered into SDWIS/FED. 10/6/04 letter acknowledges the 4 repeat samples were ND (2 taken on both 6/17/04 and 6/22/04) and requires the system to take 5 routine samples the next month. This letter was sent approximately 3 months late, incorrectly refers to these as follow-up samples, and requires these to be collected by 11/15/04 instead of during October 2004. (The LHD should have previously required the system to take these samples during July 2004.) 5/26/05 letter says the DHD received results of 5 follow-up samples and all were ND, and system is now in compliance. However, the system apparently closed for the season in September 2004 and did not sample again until April 2005 during which it apparently only collected 4 samples.

12/29/04 "approval to resume water service" letter to Lac La Bell Lodge following the December 2004 TCR monthly MCL violation says department received results for 2 samples taken on 12/26/04 and 12/27/04 and both tested ND. However, there are no results for a 12/26/04 sample in WaterTrack, but there are results for 2 samples taken on 12/27/04 both shown as being taken at "basement W" at 7:00 am. However, MDEQ procedures require that these samples be taken at least 8 hours apart.

There is no documentation in the file that W. UP DHD instructed the Lac La Bell Lodge to take repeat samples following the 12/20/04 TC+ sample.

It appears that the DHD may not be instructing systems to collect all repeat samples on the same day as required, because it did not issue minor repeat M/R (type 26) violations to Keweenaw Mountain Lodge and Lac La Bell Lodge after they failed to collect all 4 repeat samples on the same day following positive routines samples at Keweenaw Mountain Lodge in May 2004 and June 2004, and at Lac La Bell Lodge in December 2004. Keweenaw Mountain Lodge collected 2 of its 4 repeat samples following the 5/3/04 TC+ routine sample on 5/5/04, and 2 on 5/6/04. Lac La Bell Lodge collected 2 of its 4 repeat samples following the 12/20/04 TC+ routine sample on 12/22/04, and 2 on 12/27/04.

The 1/24/04 NOV violation for the unreported January 2005 TCR monthly TCR MCL violation at Lac La Bell Lodge tells system to send back a copy of the signed/dated PN but a signed/dated copy of the PN for this violation mailed back by the system is not in the file.

If the system did not PN for the January 2005 TCR MCL violation it should have been fined under the State Administrative Fines Policy \$1,000 per day up to the maximum amount of fine per violation of \$2,000 (for water systems that serve 10,000 or fewer people).

Keweenaw Mountain Lodge collected its May 2004 and June 2004 routine sample from the #1 well tap instead of from a distribution system tap as required.

The audit team made the following additional observations:

Very thorough TCR MCL NOVs which give systems the option of closing, using an approved alternate nearby water source, or using temporary precautionary measures to protect public health. They allow limited use of a water supply on a temporary basis (not to exceed 90 days) with appropriate PN and precautionary measures while system investigates and resolves the problem. The system must provide bottled water from licensed commercial source, or hauled water (that meets the conditions listed), post notices at water outlets and disconnect all drinking fountains, ice machines and beverage machines from the water system. It also must conduct an investigation to determine the cause of the problem, and methods of correction using a water well contractor or licensed consultant. Based on the investigation it must develop a plan, submit a schedule detailing proposed corrective work and equipment needed to resolve the problem, and complete the corrective measures, disinfect the water system, pump supply to waste until all chlorine is removed, obtain 2 consecutive chlorine-free non-detect (ND) TCR samples collected at least 8 hours apart, and notify department in writing. If the problem cannot be resolved, the well must be abandoned and sealed by a licensed well driller. To remain open, permanent water hauling is required for all users and a license must be obtained from MDEQ.

The TCR MCL violation that occurred in May 2004 at Keweenaw Mountain Lodge's well # 1 system was not reported to SDWIS/FED. The sample taken on 5/3/04 at the well # 1 system was TC+. A 5/13/04 NOV letter for this violation is in the file.

The 5/14/04 "approval to resume water service" letter issued to Keweenaw Mountain Lodge acknowledges receipt of results of ND samples taken on 5/11/04 and 5/12/04, and requires system to take 5 "follow-up" samples by 6/15/04 (and credits another 5/12/04 sample system took towards these 5). The DHD should refer to these 5 samples as routine samples and require them to be taken during the next calendar month the system provides water to the public. The 10/6/04 letter following the June 2004 TCR acute MCL to this system, incorrectly refers to 5 routine samples the next month as follow-up samples, and requires these to be collected by 11/15/04 instead of during October 2004. (MDEQ advised R5 that MDEQ agrees the various types of samples should be called by the appropriate name in order to avoid confusion.)

9/14/05 letter notifies Keweenaw Mountain Lodge that, based on attached results, system's water system is unsafe for consumption and must not be used, and that a

detailed MCL NOV letter will be issued to it shortly. It instructs the system to post attached advisory at every potable water outlet. A copy signed and dated by the owner on 9/14/05 is in the file. 9/16/04 NOV letter for 9/13/04 acute MCL violation says all 10 samples were TC+ and 6 of these were EC +. 9/15/05 letter from engineering firm retained by the owner states what steps staff at system have taken in response to failed TCR samples: kitchen shut down on 9/14/05, etc., entire system was chlorinated, flushed, set of 10 TCR samples will be taken on 9/15/05 after the chlorine residual is flushed from the systems for the 3 wells supplying the motel, lodge, and cabin area. A second set of 10 will be taken on 9/16/05.

Following the EV the DHD advised R5:

The well was taken out of service after the positive samples in September 2005. The facility operated for the next few weeks under precautionary measures until closing for the season. Precautionary measures included: consumption advisories posted at all water outlets, well #001 was the only well in service, hauled water used for all cooking and cleaning (water turned off to kitchen), commercial bottled water in the guest rooms, sanitizer verification during dish washing.

A meeting was held at the Health Department on March 31, 2006 to discuss the water supply for the 2006 operating year. The facility's engineering consultant suggested the facility begin opening procedures three weeks early and if satisfactory water samples are received to operate with the on-site wells. This operation was not approved by the Health Department and a follow up letter on April 4, 2006 had the following options: Haul in all water and use the existing bulk water holding tank as a reservoir or connection to the municipal water supply at Copper Harbor.

The facility chose to connect to the municipal water line from Copper Harbor. There has been periodic water samples taken by the consultant engineer in 2006 for possible flushing the new water line with chlorinated water due to elevation change of the facility and for more data on well correction effectiveness (water from the facility was not required). Prior to opening for the 2006 season the wells were isolated from the facility's water supply lines and the temporary municipal water line was connected to the facility. The facility operates 100% under municipal water supply.

The DHD's "approval to resume water service" letters should advise the system that it can discontinue precautionary measures, including PN

The January 2005 TCR MCL violation at Lac La Bell Lodge was not reported to SDWIS/FED. A 1/24/05 NOV letter was issued for this violation based on 2 of the 6 routine samples the system took the month after the December 2004 TCR MCL violation testing TC+ (1/18/05 and 1/19/05 sample).

The 10/8/03 sanitary survey results letter instructs Lac La Bell Lodge, if it shuts down all or part of the water system for seasonal purposes, it must, prior to opening in the spring, disinfect the well and distribution system, completely flush all chlorine residual, and collect at least 2 safe TCR samples after collected at least 8-hours apart, that are free of any chlorine residual.

4.2.2.2 <u>Nitrate MCL Violation Follow-Up</u>

The audit team reviewed follow-up for 1 nitrate MCL violation at Lac La Bell Lodge. The audit team found the DHD followed its procedures for this violation. However, the following problems were found with this violation:

The 12/16/04 letter should have instructed the system to take a nitrate confirmation sample following the 12/14/04 nitrate sample result of 11.6 mg/l within 24 hours instead of 48 hours.

The audit team made the following additional observations:

12/23/04 nitrate MCL NOV letter notifies the system it exceeded the nitrate MCL, and must institute precautionary measures including providing bottled or hauled water (meeting the conditions listed) for infants and those who request it, and posting at water outlets. It also tells the system to begin seeking a new source. It also tells system to conduct an investigation to determine the cause of the problem, and methods of correction using a water well contractor or licensed consultant. It tells system it must develop a plan, and complete the corrections by 8/1/05 and notify the department in writing how the problem was resolved. It says if the problem cannot be resolved that the well must be abandoned and sealed by a licensed well driller. A new drilled well may be required, or, to remain open, permanent water hauling is required for all users and a license must be obtained from MDEQ. It says precautionary measures are considered temporary, and will allow the system to operate and protect public health while it investigates the cause of the problem and completing necessary remedial action. It says full compliance with the interim precautionary measures is necessary for the continued operation of the facility, until a water supply meeting the requirements of the MI SDWA can be provided.

A supply of PNs was enclosed with the 12/23/04 NOV, and it tells the system to sign and date one of the notices and mail it back to the department. A copy signed by the system on 12/23/04 is in the file.

2/17/05 memo to file that sanitarian called system to remind to keep the MCL notices posted in the cottages and restaurant unit a final correction can be made this summer.

8/17/05 letter inquiring on the status of correction measures to comply with the nitrate MCL violation says the 12/23/05 NOV only authorized the system to be open on precautionary measures not to exceed 8/1/05, but the department has not received an application for a new well or information on alternative means of complying. It tells system to send a plan of correction and/or the equipment used to resolve the problem, and that if a new well is not drilled that the equipment used to remove nitrate or water hauling would have to be approved. It tells system to continue to comply with the same precautionary measures required in the 12/23/04 NOV.

12/5/05 "connection to an existing well" letter notifying system that the pump test results were received from system's contractor, and the replacement well is approved. It also grants system's request to extend the deadline for connecting to the new well due to seasonal weather conditions. It says the system must connect to the new well and

abandon the existing well by 5/1/06. It tells system to continue to comply with the same precautionary measures required in the 12/23/04 NOV.

8/10/05 email to file from sanitarian documents 8/29/05 a site visit to inspect a private well for the possibility of it replacing the current Type II well. It says a certified well driller will have to pump test it to determine peak flow, and that nitrate samples were taken from both wells and also a TCR sample from the proposed new well. (11.6 mg/l and ND nitrate results, respectively, for these samples in WaterTrack) Handwritten note (only partially legible) on above email on 10/5/05 phone call from system to the department states system plans on taking sample in 10/05/05, and contacted a well driller concerning test pumping. (The only other nitrate result in WaterTrack is 12.7 for an 11/29/05 sample).

11/1/05 "connection to an existing well" letter to system references conversation with system in September 2005 concerning the timetable to disconnect and abandon the existing well and connect to an existing well, encloses the well logs for the existing and proposed new well, and asks system to complete and return enclosed fixture count form to calculate the required minimum capacity flow rate required. It also tells the system to contact a certified contractor to test pump the well for maximum attainable flow rate. It says the 8/29/05 TCR and nitrate samples from the proposed well were good, and tells system to take another TCR sample from the well ASAP because 2 taken at least 8 hours apart required for approval. It tells system to continue complying with the precautionary measures until the corrections are made and safe water samples are received.

Following the EV, the DHD advised R5 that it made a site visit to inspect the new water line that was constructed to the replacement well and new 50 gpm pump for the well. The well had to be disinfected again after check samples collected in May 2006 were positive, apparently because chlorine added to the new well after construction had not been flushed into the new line. The system was required to take 5 routine samples in June 2006. Two were TC+, but sampling error was suspected and 2 replacement samples taken a day apart were ND, and system was told to collect 5 routine samples in August. After all 5 the August samples were TC+, the DHD immediately faxed the system an MCL violation notice and postings, and made a site visit on 8/9/06 during which it verified posting and bottled water use. A well driller was contacted and scrubbing, bailing and pumping of the well casing was performed along with super chlorination. A sample taken on 8/8/06 was TC+, as were some of several more samples that were taken at different sampling points on different days. The coliform species was identified by the MDPH water lab in two different water samples and was Serratia species coliform (aerobic bacteria). A well scrubbing, surging, and chlorination was performed when the facility could be completely closed for a few days. The facility continued to operate under precautionary measures. The well was disinfected and two water samples taken 8 hours apart on 11/2/06, both ND. DHD sent system letter on 11/9/06 that required the system to collect 5 additional samples before precautionary measures would be lifted. The owner called before the letter was sent, and said 3 additional samples were taken on 11/9/06 and these were ND. The DHD visited the system on 11/13/06 to verify that chlorine was not in the water. The owner had taken the 2 additional samples and if they are ND, the precautionary measures will be lifted. An additional water sample will be required to be taken in December 2006 and the test result will determine future sampling requirements. On 6/13/07, R5 noted sample results for 2 TCR samples taken on 11/13/06 and a sample taken on 12/5/07 which were all ND.

M/R Violation Follow Up

The audit team reviewed follow-up for 3 M/R violations (2 TCR, and 1 nitrate). The audit team found the CHD generally followed its procedures for 1 of the TCR M/R violations. The team found the following problems with the other 2 cases:

W.UP DHD should have sent Subway Greenland a sample reminder and \$200 fine warning notice 30-90 days before the end of the 2005 nitrate annual CP, assessed a \$200 fine for failure to sample by the end of the CP, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be assessed a \$400 fine if it fails to sample by this date.

The DHD did not issue Greenland Subway an NOV for a 7-9/05 TCR M/R violation, or request the system to PN for the violation.

The audit team made the following additional observations:

DHD sent Greenland Subway a reminder post card to take its TCR sample for the 7-9/05 quarter.

DHD also sent the system a 4/22/05 letter confirming that the system sampled for TCR on 4/22/05 and is now in compliance with water monitoring standards.

The 1/6/06 NOV sent to Subway Greenland for a 2005 nitrate M/R violation warns system that, in the future, failure to collect required samples will result in civil fines of \$200, and a \$400 fine for each subsequent monitoring violation. It sets a new sample deadline of 1/18/06, and warns further action and/or civil fines will be assessed if a sample is not submitted by this date. The system did not sample until 2/1/06, but was not fined.

The LHD appears to exceed the authority of MDEQ's administrative fine policy and procedures by issuing warnings and/or fines for missing a new sampling deadline set for a system on quarterly TCR monitoring before the end of the next quarter. (MDEQ advised R5 that the Michigan Safe Drinking Water Act (SDWA), Rule 325.1007 (2) (a), states, merely, the Department may impose a \$200 fine for failure to collect a water sample under this act. "Under this act," of course, includes the rule(s) where the Department can establish any monitoring requirement at least as stringent as the minimum requirements established in the Act. Relative to this, the Fines Policy offers further guidance for administering fines. Issuing a fine after the first quarterly monitoring violation or after a missed deadline established prior to the end of a quarter may not be included in the Fines Policy, but it does not exceed the authority of the SDWA.)

NOV letters were issued for 2 of the 3 M/R violations. These NOVs require the system to PN, and enclose a PN for the system to use. However, they do not require the system to send back a signed and dated copy of its PN.

Enforcement Data in SDWIS/FED

The TCR MCL violation that occurred in May 2004 at Keweenaw Mountain Lodge's well # 1 system was not reported to SDWIS/FED. The sample taken on 5/3/04 at the well # 1 system was TC+. There is a 5/13/04 NOV letter for this violation is in the file. It says 3 of 4 repeats taken on 5/5/04 and 5/6/04 were TC+. The 2 samples taken on 5/5/04, and 1 of 2 samples taken on 5/6/04 were TC+.

The January 2005 TCR MCL violation at Lac La Bell Lodge was not reported to SDWIS/FED. A 1/24/05 NOV letter was issued for this violation based on 2 of the 6 routine samples the system took the month after the December 2004 TCR MCL violation testing TC+ (1/18/05 and 1/19/05 sample).

The average of the Lac La Bell Lodge's 11.6 mg/l 12/14/04 sample and 11.3 mg/l 12/20/04 confirmation sample, which is 11.5 mg/l, should have been entered into SDWIS/FED instead of 10.9 mg/l.

Lac La Bell Lodge's December 2004 nitrate and total coliform bacteria MCL violations have been deleted from SDWIS/FED.

Western UP DHD enters its informal NOVs for M/R violations into SDWIS/FED as formal NOVs (SFJ). **MDEQs 4/17/06 response:** DEQ contacted Western UP District Health Department 3/23/07 to advise them to use the informal action codes.

Commendations and Recommendations

Commendations:

Very thorough TCR MCL NOVs which give systems the option of closing, using an approved alternate nearby water source, or using temporary precautionary measures to protect public health. They allow limited use of a water supply on a temporary basis (not to exceed 90 days) with appropriate PN and precautionary measures while system investigates and resolves the problem.

Very thorough nitrate MCL NOV letter which notifies the system it must institute precautionary measures including providing bottled or hauled water (meeting the conditions listed) for infants and those who request it, and posting at water outlets. The NOV letter instructs the system to begin seeking a new water source, and conduct an investigation to determine the cause of the problem and methods of correction using a water well contractor or licensed consultant. It requires the system to develop a plan, complete the corrections by 8/1/05, and notify the department in writing how the problem was resolved. It says if the problem cannot be resolved that the well must be abandoned and sealed by a licensed well driller. A new drilled well may be required, or, to remain open, permanent water hauling is required for all users and a license must be obtained from MDEQ. It says precautionary measures are considered temporary, and will allow the system to operate and protect public health while it investigates the cause of the problem and completing necessary remedial action. It says full compliance with the interim precautionary measures is necessary for the continued operation of the facility, until a water supply meeting the requirements of the MI SDWA can be provided.

Good follow-up for the second acute TCR MCL violation at Keweenaw Mountain Lodge in September 2005, and very good follow-up and file documentation for the December 2004 nitrate MCL violation at Lac La Bell Lodge. A site visit was made on 8/29/05 to inspect a private well for the possibility of it replacing the current Type II well. DHD required the system to have a certified contractor test pump the well for maximum attainable flow rate. 11/1/05 "connection to an existing well" letter to system references conversation with system in September 2005 concerning the timetable to disconnect and abandon the existing well and connect to an existing well DHD, notifies system that the 8/29/05 TCR and nitrate samples from the proposed well were good, and instructs system to take another TCR sample from the well ASAP because 2 taken at least 8 hours apart required for approval. It also instructs the system to continue complying with the precautionary measures until the corrections are made and safe water samples are received.

The DHD requires seasonal systems to collect TCR samples prior to opening for the season.

Systems are sent reminder post cards for quarterly TCR monitoring, and letters confirming that systems sampled by the new deadline set in NOVs issued for quarterly TCR monitoring violations, and are now in compliance with water monitoring standards.

Major Recommendations:

It is imperative that the DHD immediately follow-up on acute TCR MCL violations and issue a written NOV to the system as soon as possible.

All TCR MCL violations to must be reported to SDWIS/FED.

The DHD should not clear MCL violations unless the system collects 2 consecutive ND check samples that were taken at least 8 hours apart.

The DHD should instruct systems not to collect TCR routine samples from raw water taps.

The DHD should instruct systems that all 4 repeat samples must be collected on the same day within 24 hours of being notified of the positive routine sample result.

Improve tracking receipt of PNs for MCL violations from systems, and filing them in the system files. If a system does not provide PN for an MCL violation, it should be fined under the State Administrative Fines Policy \$1,000 per day up to the maximum amount of fine per violation of \$2,000 (for water systems that serve 10,000 or fewer people).

The DHD should issue monitoring reminder and \$200 fine warning notices 30-90 days before the end of the CP for annual and less frequently scheduled monitoring. The DHD should issue a \$200 fine to systems that fail to sample, set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warn the system it will be assessed a \$400 fine if it fails to sample by the new date.

The DHD should issue informal NOV letters for all M/R violations and escalate to formal NOVs and request informal hearing once a system becomes an M/R SNC.

NOV letters issued for M/R violations should instruct systems to send back a copy of the signed/dated PN the system posted.

DHD should re-enter the violations it deleted from SDWIS/FED after the EV.

Minor Recommendations:

The DHD's "approval to resume water service" letters should advise the system that it can discontinue precautionary measures, including PN.

The DHD should use the correct average value of the results of the initial nitrate sample and the confirmation sample when reporting nitrate MCL violations to SDWIS/FED.

The DHD should enter its NOVs for M/R violations into SDWIS/FED as informal notices of violation (SIA code) instead of formal NOVs (SFJ).

SYSTEM	SYSTEM	System	Violations	Ctoto Astion E-11	OFFICE OPERATION
ID	NAME	Type/	violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
	TAZ KIVIES			· ·	
MI4220010	Keweenaw	Pop. TN/100	6/041	Discrepancies	
1711-1220010	Mountain	11\/100	6/04 bacti	No-An NOV letter	The bacti MCL violation that occurred in 5/04 at well # 1 system was
	Lodge		acute MCL	was not issued for	not reported to S/F. The sample taken on 5/3 at the well # 1 system was
	Louge			this violation, and the	TC+. There is a 5/13/04 NOV letter for this violation is in the file. It
				system was not told	says 3 of 4 repeats taken on 5/5 and 5/6 were TC+. The 2 samples taken
				to provide PN.	on 5/5, and 1 of 2 samples taken on 5/6 were TC+.
				6/10/04 letter advises	The 2 repeat samples taken on both 5/5 and 5/6 were taken from the site
				system that its 6/3	of the original positive (well tap), and the motel laundry. The system
				routine sample taken	also collected 5 more samples from each of these locations later in 5/04
				from the tap of Well	which were all ND
				# 1 was E. coli + and	
			4	instructs it to collect	5/14/04 "approval to resume water service" letter acknowledges receipt
				4 repeat samples: 1	of results of ND samples taken on 5/11 and 5/12, and requires system to
				from the site of the	take 5 "follow-up" samples by 6/15/04 (and credits another 5/12 sample
				initial positive, 1	system took towards these 5). The DHD should refer to these 5 samples
				from the raw water	as routine samples and require them to be taken during the next calendar
				sample tap, and the	month the system provides water to the public.
				remaining samples	
				may be collected	It appears that the DHD may not be instructing systems to collect all
				from other locations	repeat samples on the same day as required, because it did not issue a
				in the well #1	minor repeat monitoring violation to this system and another system
				distribution system.	when they did not collect all 4 repeat samples on the same day. This
				The letter C-11-4.	system collected 2 of its 4 repeat samples following the 5/3/04 TC+
				The letter fails to	routine sample on 5/5, and 2 on 5/6.
				mention that the	V d l mcP a cor aver-
j				sample taken at the	Very thorough TCR MCL NOVs which give systems the option of
				motel laundry the	closing, using an approved alternate nearby water source, or using
				same day	temporary precautionary measures (PMs) to protect public health. They

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				was TC+, and that the	allow limited use of a water supply on a temporary basis (not to exceed
				system had an MCL	90 days) with appropriate PN and PMs while system investigates and
	i.			violation. A 6/04	resolves the problem. The system must provide bottled water from
				acute MCL violation	licensed commercial source, or hauled water (that meets the conditions
				was entered into S/F.	listed), post notices at water outlets and disconnect all drinking
					fountains, ice machines and beverage machines from the water system.
		ļ		10/6/04 letter	It also must conduct an investigation to determine the cause of the
				acknowledges the 4	problem, and methods of correction using a water well contractor or
				repeat samples were	licensed consultant. Based on the investigation it must develop a plan,
				ND (2 taken on both	submit a schedule detailing proposed corrective work and equipment
				6/17 and 6/22) and	needed to resolve the problem, and complete the corrective measures,
				requires the system to	disinfect the water system, pump supply to waste until all chlorine is
				take 5 routine	removed, obtain 2 consecutive chlorine-free non-detect (ND) bacti
				samples the next	samples collected at least 8 hours apart, and notify department in
				month. This letter	writing. If the problem cannot be resolved, the well must be abandoned
				was sent	and sealed by a licensed well driller. To remain open, permanent water
				approximately 3	hauling is required for all users and a license must be obtained from
				months late,	MDEQ.
				incorrectly refers to	
				these as follow-up	NOV also tells the system it must take 5 subsequent bacti samples
				samples, and requires	during the next month of operation.
				these to be collected	
				by 11/15/04 instead	The DHD's "approval to resume water service" letters should advise the
				of during 10/04.	system that it can discontinue PMs, including PN.
		į.		(The LHD should	· •
				have previously	
				required the system	
				to take these samples	

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				during 7/04.)	· · · · · · · · · · · · · · · · · · ·
				,,,	
				5/26/05 letter says the	
				DHD received results	
				of 5 follow-up	
•	-			samples and all were	
				ND, and system is	
				now in compliance.	
				However, the system	
				apparently closed for	
		ļ		the season in 9/04	
				and did not sample	
				again until 4/05	
			-	during which it only	
				collected 4 samples.	
			9/05 bacti	Yes-9/14/5 letter	9/15/05 letter from engineering firm retained by the owner states what
			acute MCL	notifies system that	steps staff at system have taken in response to failed bacti samples:
				based on attached	kitchen shut down on 9/14, etc., entire system was chlorinated, flushed,
				results, system's	set of 10 bacti samples will be taken on 9/15 after the chlorine residual
				water system is	is flushed from the systems for the 3 wells supplying the motel, lodge,
•				unsafe for	and cabin area. A second set of 10 will be taken on 9/16.
				consumption and	
				must not be used, and	The Well # 4 system had 3 more EC + samples and 1 more TC+ bacti
				that a detailed MCL	sample later in 9/05.
				NOV letter will be	-
				issued to it shortly. It	According to bacti results in WaterTrack, the Well # 2 system had a
				instructs the system	monthly MCL violation in 10/05 with 4 of 26 bacti sample testing TC+.
				to post attached	It also had a TC+ sample on 5/24/06. There are no bacti sample results

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
~-	İ	Pop.		Discrepancies	
				advisory at every	for the Well # 4 system in WaterTrack since 9/22/05. The Well # 1
				potable water outlet.	system had 1 TC+ sample (of 13) in 4/06.
				A copy signed and	
•				dated by the owner	**The well was taken out of service after the positive samples in 9/05.
				on 9/14/05 is in the	The facility operated for the next few weeks under precautionary
				file.	measures until closing for the season. Precautionary measures
					included: consumption advisories posted at all water outlets, well #001
		E.		9/16/04 NOV letter	was the only well in service, hauled water used for all cooking and
				for 9/13 acute MCL	cleaning (water turned off to kitchen), commercial bottled water in the
				violation says all 10	guest rooms, sanitizer verification during dish washing.
				samples were TC+	
			1	and 6 of these were	A meeting was held at the Health Department on March 31, 2006 to
*				EC +. According to	discuss the water supply for the 2006 operating year. The facility's
				the results in	engineering consultant suggested the facility begin opening procedures
	:			WaterTrack, the Well	three weeks early and if satisfactory water samples are received to
				# 2 system incurred	operate with the on-site wells. This operation was not approved by the
				an acute bacti MCL	Health Department and a follow up letter on April 4, 2006 had the
				violation with 7 TC+	following options: Haul in all water and use the existing bulk water
				9/13 samples, 5 of	holding tank as a reservoir or connection to the municipal water supply
				which were also EC+;	at Copper Harbor.
				the Well # 4 system	
				incurred an acute	The facility chose to connect to the municipal water line from Copper
				MCL violation with a	Harbor. There has been periodic water samples taken by the consultant
				9/13 and 9/14 EC+	engineer in 2006 for possible flushing the new water line with
				sample, and the Well	chlorinated water due to elevation change of the facility and for more
				# 1 system incurred a	data on well correction effectiveness (water from the facility was not
				monthly bacti MCL	required). Prior to opening for the 2006 season the wells were isolated
				violation with 2 TC+	from the facility's water supply lines and the temporary municipal water

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				9/13 (and 1 9/22	line was connected to the facility. The facility operates 100% under
) (T. (00.000				TC+) samples.	municipal water supply.
MI4220029	Lac La Bell	TN/25	12/04 bacti	No	W. UP DHD should instruct systems to take 5 routine samples (rather
	Lodge		monthly	12/23/04 NOV letter	than "follow-up samples," and should require that they all be taken
			MCL	bases the MCL	during the next calendar month.
				violation on the 2	
				TC+ samples	TCR MCL violation for 1/05 was not reported to S/F. A 1/24/05 NOV
				collected on	letter was issued for this violation based on 2 of the 6 routine samples
				12/22/04. However,	the system took the month after the 12/04 bacti MCL violation testing
				there is a TC + result	TC+ (1/18 and 1/19 sample).
				in WaterTrack for an	
				earlier (routine?)	The 1/24/05 NOV tells system to send back a copy of the signed/dated
				sample taken on	PN but a signed/dated copy of the PN for this violation mailed back by
				12/20/04 at the "bac	the system is not in the file.
			10	kitche," and the 12/22	
				samples are shown as	2/3/05 "approval to resume water service" letter says department
			ļ	repeat samples in	received results for 2 samples taken on 1/27 and 1/31 and both tested
				WaterTrack. The	ND. It tells system to take 5 additional follow-up samples by 3/4/05.
				"sample reason" for	The system complied. There are ND results for one 2/28, two 3/1 and
				the 12/20 sample is	two 3/2 samples in WaterTrack. 3/8/05 letter to system confirming that
				also shown as repeat	system's "five (5) follow-up water samples" all tested ND and system is
				sample, but it appears	now in compliance.
				that it was a routine	
				sample because there	The 12/04 monthly bacti MCL (type 22) violation should have been
			,	are no results for TC+	entered for the 10-12/04 quarter because the system was on quarterly
				samples taken prior	monitoring frequency. R5 comment : Following the EV, MDEO
				to 12/20 that would	Noncommunity Unit staff advised R5 staff that the Noncommunity
				explain why the	program started reporting all MCL violations with a duration of one

SYSTEM ID	SYSTEM NAME	System Type/	Violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
		System Type/ Pop.	Violations	'- '	month in April 2004 after WaterTrack came on line. This was done so they could report 2 consecutive MCL violations (e.g. a system has MCL violation when it performs it quarterly sampling, resolves the MCL, and has another MCL violation when it takes the required 5 samples the following month). MDEQ's 4/17/07 response: WaterTrack was designed to represent all bacti MCLs as 1-month violations to help DEQ track where two or more violations occur within the same quarter, indicating where LHDs may be taking systems off precautionary measures too quickly without adequately addressing the problem.
				same day. This system collected 2 of	The DHD's "approval to resume water service" letters should advise the

SYSTEM ID	SYSTEM NAME	System Type/	Violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
		Pop.		Discrepancies	
				its 4 repeat samples following the 12/20/04 TC+ routine sample on 12/22, and 2 on 12/27.	system that it can discontinue PMs including PN.
				NOV tells system to send back a copy of the signed/dated PN, and a copy signed and dated by the system on 12/23/04 is in the file.	
				12/29/04 "approval to resume water service" letter says department received	
				results for 2 samples taken on 12/26 and	
				12/27 and both tested ND. It tells system to	
				take 5 additional follow-up samples by 2/4/04. However,	
				there are no results	
				for a 12/26 sample in WaterTrack, but there	

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID SYSTEM	NAME	Type/	VIOLUTIONS	Flow Chart?/	
עוו	INVAINITE	Pop.		Discrepancies	
		1 0p.		are results for 2	
		-		samples taken on	
			3	12/27 both shown as	
				being taken at	
				"basement W" at	
				7:00 am. MDEQ	
				procedures require	
				that these samples be	
				taken at least 8 hours	
				apart.	The 12/23/04 NOV letter also says if the problem cannot be resolved
			12/04	Yes- except the	that the well must be abandoned and sealed by a licensed well driller. A
			Nitrate	12/16/04 letter should have directed the	new drilled well may be required, or, to remain open, permanent water
			MCL	system to take a	hauling is required for all users and a license must be obtained from
				nitrate confirmation	MDEQ. It says PMs are considered temporary, and will allow the
				sample with 24 hours	system to operate and protect public health while it investigates the
				instead of 48 hours	cause of the problem and completing necessary remedial action. It says
				because the nitrate	full compliance with the interim PMs is necessary for the continued
				result of 11 mg/l	operation of the facility, until a water supply meeting the requirements
				(11.6 mg/l sample	of the MI SDWA can be provided.
		·		result for 12/14	
				sample in	2/17/05 memo to file that sanitarian called system to remind to keep the
				WaterTrack) received	MCL notices posted in the cottages and restaurant unit a final correction
				for their water system	can be made this summer.
				exceeds the nitrate	2 0 0 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2
				MCL of 10 mg/l.	8/10/05 email to file from sanitarian documents 8/29 site visit to inspect
					a private well for the possibility of it replacing the current Type II well.
				12/23 nitrate MCL	It says a certified well driller will have to pump test it to determine peak

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				NOV letter notifies the system it exceeded the nitrate MCL, and must institute precautionary measures (PM) including providing bottled or hauled water (meeting the conditions listed) for infants and those who request it, and posting of water outlets. It also tells the system to begin seeking a new source. It also tells system to conduct an investigation to determine the cause of the problem, and methods of correction using a water well contractor or licensed consultant. It tells system it must	flow, and that nitrate samples were taken from both wells and also a bacti sample from the proposed new well. (11.6 mg/l and ND nitrate results, respectively, for these samples in WaterTrack) Handwritten note (only partially legible) on above email on 10/5 phone call from system to the department states system plans on taking sample in 10/05, and contacted a well driller concerning test pumping. (The only other nitrate result in WaterTrack is 12.7 for an 11/29/05 sample). 11/1/05 "connection to an existing well" letter to system references conversation with system in 9/05 concerning the timetable to disconnect and abandon the existing well and connect to an existing well, encloses the well logs for the existing and proposed new well, and asks system to complete and return enclosed fixture count form to calculate the required minimum capacity flow rate required. It also tells the system to contact a certified contractor to test pump the well for maximum attainable flow rate. It says the 8/29 bacti and nitrate samples from the proposed well were good, and tells system to take another bacti sample from the well ASAP because 2 taken at least 8 hrs. apart required for approval. It tells system to continue complying with the PMs until the corrections are made and safe water samples are received. The average of the results of the original nitrate sample taken on 12/14/04 of 11.6 mg/l and the confirmation sample taken on 12/20/04 of 11.3 mg/l which is 11.4 mg/l should have been entered into S/F instead of 10.9 mg/l.
				develop a plan, and	deleted from SDWIS since the EV and should be re-entered.

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				complete the	**A site visit was made on March 21, 2006 for the semi annual
				corrections by 8/1/05	restaurant inspection; the MCL postings were present at the time of the
				and notify the	inspection.
				department in writing	and and
				how the problem was	The facility missed a quarterly bacti sample for the well for the 2 nd
				resolved.	quarter. The notice of violation letter was sent out on April 4, 2006.
					The facility collected the sample on April 4, 2006, before receiving the
				A supply of public	notice of violation a sample. A monitoring compliance notification
i				notices are enclosed	letter was sent on April 10, 2006.
				with the 12/23/04	in a second in a way
				NOV, and it tells the	When the seasonal road restrictions were lifted a water line was
				system to sign and	constructed by Siirtola Well Drilling to connect to the new well and a 50
				date one of the	GPM pump was installed. A site visit was made by Health Department
				notices and mail it	personnel on April 21, 2006. The line already had been buried and everything appeared to be in compliance. It was also noted that there
	,			back to the	was a fracture in the old wells pitless adapter and water had leaked out
			:	department. A copy	around the old well casing (the well with high nitrates).
				signed by the system	around the old well casing line well with high mirates).
				on12/23/04 is in the	A sampling requirement letter was sent on May 19, 2006 stating that
				file.	water samples have not been received for the new well. It notified the
				8/17/05 letter	facility to collect 2 bacteriological water samples eight hours apart and
				47 - 1 1 - 1 - 1	a nitrate sample.
	•			inquiring on the status of correction	a nurute sample.
				measures to comply	Samples were collected on May 21 & 22 2006. The sample collected on
				with the nitrate MCL	May 22 was PC. An unsatisfactory water sampling result was sent out
				violation says the	on May 25, 2006 and to collect 4 follow-up samples. The owner called
ıl				12/23 NOV only	the Health Department and discussed the PC sample. I discussed with
				authorized the system	the owner that the new line should have been disinfected with
				authorized the system	MAD COUNTY TO THE PARTY OF THE

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER ODGERNALTY ON THE STATE OF THE STATE O
ID	NAME	Type/	Violations	· ·	OTHER OBSERVATIONS AND COMMENTS
	1111111	Pop.		Flow Chart?/	
		Fop.		Discrepancies	
				to be open on PMs	chlorinated water. It appeared that the well was chlorinated after
				not to exceed 8/1/05,	construction but water was not flushed through the new water line. The
				but the department	well was chlorinated and water spigots were turned on at the main
				has not received an	lodge to let chlorinated water sit in the new line to disinfect.
				application for a new	
				well or information	Four repeat water samples were taken on April 25, 2006 all ND. A
				on alternative means	notice to collect five follow-up samples by June 30 2006 was sent on
				of complying. It tells	June 9, 2006. The samples were taken on June 30, 2006. Two of the
				system to send a plan	five samples tested POS. The owner called and said that he did not
				of correction and/or	leave the water run at the kitchen sink before taking the samples and
				the equipment used to	suspected sampling error. The owner was told to immediately take two
				resolve the problem,	additional samples a day apart for verification. Two samples were
				and that if a new well	taken on July 5-6, 2006 and both ND. To have final approval a letter
				is not drilled that the	was sent on July 14, 2006 to take five follow-up samples by August 11,
	E			equipment used to	2006.
				remove nitrate or	
				water hauling would	Five samples were taken on August 3, 2006, all positive. A MCL
				have to be approved.	violation and postings were immediately faxed on August 4, 2006. R5
				It tells system to	response: A 9/2006 MCL violation was entered into SDWIS, as well a
				continue to comply	9/14/06 state formal NOV (SEI) and DN request (SIE), 0/15/06
		[with the same PMs	9/14/06 state formal NOV (SFJ) and PN request (SIE), 9/15/06 state PN received (SIF), and 11/20/06 state RTC (SOX) linked to the violation.
				required in the	The facility was then energing and an average in the violation.
				12/23/04 NOV.	The facility was then operating under precautionary measures with
·					commercially bottled water with water coolers. Health department
:				12/5/05 "connection	personnel made a site visit on August 9, 2006 to verify posting and
				to an existing well"	bottled water use. Facility had postings at outlets and operating under bottled water.
				letter notifying	voinea waier.
				system that the pump	Assoll deillers and the state of the state o
		.1		system that the pump	A well driller was contacted and a scrubbing, bailing and pumping of

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
		rop.		test results were received from system's contractor, and the replacement well is approved. It also grants system's request to extend the deadline for connecting to the new well due to seasonal weather conditions. It says the system must connect to the new well and abandon the existing well by 5/1/06. It tells system to continue to comply with the same PMs required in the 12/23/04 NOV.	the well casing was performed along with super chlorination 9300 gallons of chlorinated water. Two samples were taken on August 7 & 8, 2006. Sample on August 8, was PC+. Several more samples were taken at different sampling points on different days some were PC+. The coliform species was identified by the MDPH water lab in two different water samples and was Serratia Species coliform (aerobic bacteria). Water samples were taken from wells nearby and tested ND. The owner talked with the Health Department, MDEQ, and Well Driller in great detail. A well scrubbing, surging and chlorination was planned when the facility could be completely closed for a few days. The facility continues to operate under precautionary measures. The well was disinfected and two water samples were taken eight hours apart on November 2, 2006, both ND. A collect five additional follow up letter was sent on November 9, 2006 before precautionary measures would be lifted. The owner called before the letter was sent and said three additional samples were taken on November 9, 2006, these samples were ND. Health department visited the facility on November 13, 2006 to verify that chlorine was not in the water. The owner had taken the two additional samples and if they are ND the precautionary measures will be lifted. An additional water sample will be required to be taken in the month of December and test results will decide future sampling requirements. R5 comment: On 6/13/07, there were results for 2 more 11/13/06 samples and for a 12/5/06 sample (all ND) in WaterTrack.

	CAZOTERA	la .	X 71 1	T a	
!	SYSTEM NAME	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
	NAME	Type/		Flow Chart?/	•
MIC620002	G 1	Pop.		Discrepancies	
	Subway- Greenland	TN/70		No- W.UP DHD should have sent the system a sample reminder and \$200 fine warning (R/FW) notice 30-90 days before the end of the compliance period (CP), assessed a \$200 fine for failure to sample by the end of the CP, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be assessed a \$400 fine if it fails to sample by this date. 1/6/06 NOV warns system that, in the future, failure to collect required samples will result in	W.UP DHD should enter its NOVs for M/R violations into S/F as informal notices of violation (SIA code) rather than formal NOVs (SFJ) There is no documentation in file for the 1/30/06 SIA entered into S/F for the 2005 nitrate M/R violation following the 1/6/06 notice of violation that was in the file. W. UP DHD NOV letters for M/R violations do not tell system it must post PN for a minimum of 7 days. The PN sent with the above NOVs do not include the following mandatory language for M/R violations: "and, therefore cannot be sure of the quality of your drinking water during this time." Also, they do not have a place for the system to include the name, address and phone number of a system contact for additional information, or for the system to sign and date when it posted the PN. These PNs do provide the address and phone number of the W. UP DHD's NCWS Coordinator for persons that have questions about the facility's water quality sampling. NOVs for bacti and chemical M/R violations provide information on where systems can obtain sampling bottles.

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				and a \$400 fine for	
			·	each subsequent	
				monitoring violation.	
				It sets a new sample	
				deadline of 1/18/06,	
				and warns further	
				action and/or civil	
				fines will be assessed	
-				if a sample is not	
				submitted by this	
		1		date. The system did	
				not sample until	
				2/1/06, but was not	
				fined.	
				The NOV tells	
				system that the	
				attached PN must be	
				posted until	
				acceptable test results	
				are obtained, BUT	
	:			does not tell the	
		Ì		system to send back a	
				signed and dated	
				copy of its posting.	*The LHD appears to exceed the authority of the state civil fine policy
			1-3/05 bacti	Yes*-4/5/05 NOV	*The LHD appears to exceed the authority of the state civil line poncy
			M/R	letter sets a new	by issuing warnings and/or fines for missing a new sampling deadline
				sample due date of	set for a system on quarterly bacti monitoring before the end of the next

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				4/22/05, and says failure to sample by that date may result in a \$200 civil fine, and a \$400 fine for each subsequent monitoring violation. The system sampled before the deadline, on 4/11/05, and a fine was not issued. However, issuing a fine for a system's first quarterly bacti M/R violation during a 12-month period is earlier than issuing a fine for a second violation as outlined in MDEQ's administrative fines policy and procedures. Setting a new sample deadline, for a system on quarterly bacti monitoring, before the end of the next	quarter. MDEQ's 4/17/07 response: The Michigan Safe Drinking Water Act (SDWA), Rule 325.1007 (2) (a), states, merely, the Department may impose a \$200 fine for failure to collect a water sample under this act. "Under this act," of course, includes the rule(s) where the Department can establish any monitoring requirement at least as stringent as the minimum requirements established in the Act. Relative to this, the Fines Policy offers further guidance for administering fines. Issuing a fine after the first quarterly monitoring violation or after a missed deadline established prior to the end of a quarter may not be included in the Fines Policy, but it does not exceed the authority of the SDWA. R5 Recommendation: MDEQ's administrative fines policy and procedures should be updated to clarify it allows issuing warnings and/or fines for missing a new sampling deadline set for a system on quarterly TCR monitoring before the end of the next quarter. W. UP DHD is commended for sending the system a 4/22/05 letter confirming that system sampled for bacti on 4/22/05 and is now in compliance with water monitoring standards.

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
110		Pop.		Discrepancies	
				quarter and warning	
			,	that it will be fined if	
-				it misses this deadline	
				appears to be the	
				result of mistakenly	
				applying the fine	
				policy for sampling	
				events that occur	
				once per year or less	
				to quarterly bacti	
				sampling.	
				The NOV tells	
				system that the	
				attached PN must be	
				posted until	
				acceptable test results	
				are obtained, BUT does not tell the	
				system to send back a	
				signed and dated	
				copy of its posting.	
			7-9/05 bacti	No-W. UP DHD did	Copy of 10/5 email from a person with a lab? to W. UP DHD staff
			/-9/03 bacti M/R	not issue an NOV, or	person that says system owner was in today and picked up water bottles.
			141/18	request the system to	It also says the system owner told her that she had been on maternity
				PN for the violation.	leave and none of her workers called or told her that she got a post card
				ATT TO THE PROPERTY.	about the bacti sample being due, and that she will take the sample
					There is a 10/12/06 bacti sample result (ND) in WaterTrack.

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
	·				W. UP DHD is commended for sending system the system a reminder post card to take its bacti sample for the 7-9/05 quarter.

^{**}LHD comments on the draft EV chart (in italics)

Appendix F Chippewa CHD

Summary of EV Findings and Region 5 Commendations and Recommendations

TCR MCL Violation Follow-Up

The audit team reviewed follow-up for 1TCR MCL violations at Daily Bread Restaurant. The audit team found the DHD followed its procedures for this violation. However, the following problems were noted:

The written notification the 4/16/05 NOV issued to Daily Bread Restaurant for its April 2005 TCR monthly MCL violation required the system to provide regarding the corrective actions it took or equipment it used to resolve the problem, and that the system has been disinfected and 2 safe water samples obtained was not in the file.

The 4/18/05 "MCL is Over; 5 Samples Needed for Next Month" letter instructs the system to take 5 TCR samples in May 2005, and that it may collect as many as 5 at the same time, as long as each sample is from a tap used for drinking (and not to use mop sinks or outside taps). It should have said that the system may collect as many as 5 at the same time, as long they are collected from different taps that are used for drinking. The CHD later corrected this language in the letters it sent on 12/13/05 following the 12/8/05 TC+ routine sample, and 1/23/06 following the 1/12/06 positive routine sample. After the EV, DHD advised us that this was corrected in future mailings.

The audit team made the following additional observations:

The NOV letter provides the system with very thorough instructions. It tells it that the water from the well must not be used for drinking water or other potable purposes until further notice from the CHD. It provides the system with three acceptable courses of action: 1) close and cease operations; 2) Use another nearby approved source of water; and 3) use temporary precautionary measures to protect public health. It says as per the MI SDWA, the CHD will allow limited use of the water supply on a temporary basis (not to exceed 90 days) with appropriate PN and precautionary measures.

A one and a half page explanation of precautionary measures is provided including: providing bottled or hauled water or another Type II water system; minimizing exposure by posting and disconnecting all drinking fountains, ice machines, and beverage machines from the water supply; implementing remedial action (conduct investigation of cause and identify methods for correction; develop a plan to correct problem, and submit a written schedule to the CHD within 30 days detailing proposed corrective work or equipment; and complete all corrective measures within 90 days. It also tells the system, if problem cannot be corrected, to complete the following to return the system to normal operations: 1) complete the corrections; 2) disinfect the entire water supply overnight if possible (by licensed well driller or other qualified individual recommended); 3) pump the supply to waste until all chlorine is removed from the system; 4) obtain two consecutive chlorine free ND TCR samples collected at least 24 hours apart, and 5) notify the CHD in writing of the corrective actions taken or equipment used to resolve the problem, that the supply has been disinfected and 2 safe water samples obtained.

The NOV letter also tells the system that it must post each water outlet using the enclosed supply of PNs and it must sign and return one copy of the PN to the CHD immediately. A pre-paid envelope is included for the system to use.

There was no documentation of the LHD's notification of the system to collect repeat samples following the 1/12/06 TC+ sample.

The MCL violation should have been entered into SDWIS/FED for March 2005 instead of April 2005 because the routine total coliform positive sample was taken during March 2005 on 3/31/05. **LHD response:** By design, WaterTrack calculates an MCL using the repeat confirmation TC+ sample date. If the samples are collected over a two month period, the latter month is flagged for the MCL date (by design).

M/R Violation Follow Up

The audit team reviewed follow-up for 3 M/R violations (1 TCR, 1 nitrate, and 1 LCR triennial reduced tap M/R violation). The audit team found the CHD generally followed its procedures for the TCR M/R violation. The team found the following problems with the other 2 cases:

The CHD should have sent Drummond Island Elementary School a sample reminder and \$200 fine warning notice 30-90 days before the end of the 2002-2004 LCR triennial reduced tap monitoring CP, assessed a \$200 fine for failure to sample by the end of the CP, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be assessed a \$400 fine if it fails to sample by this date. (The 8/3/05 NOV letter does note that "...in part due to computer problems, this monitoring violation was not noticed until now, and the usual extra reminder notice from our office was not sent.") LHD response: WaterTrack only works for monitoring LCR when the correct start year is entered for the 3-year window. The transfer from T2 to WaterTrack did not incorporate the correct start year, and it was not determined in time to trigger the reminder notice. (MDEQ advised R5 that the transition to WaterTrack from T2 involved a long period in late 2003 and early 2004 where LHDs had no access to a database and tracking system. Even after the arrival of WaterTrack in April 2004, there was a large backlog of data entry and updating of records that needed to be accomplished before LHDs could accurately track monitoring. That some LHDs were late in implementing the Minor Revisions to the LCR compounded the problems they experienced with monitoring in the first year of WaterTrack use.)

The 8/3/05 NOV letter asked Drummond Island Elementary School to complete the enclosed form and send it to the CHD, so that the number of lead/copper samples required from the facility can be determined. This should have been done in 2001 when the LCR Minor Revisions were implemented by the MI Noncommunity program. (MDEQ advised R5 that MDEQ agrees that implementation of the Minor Revisions to the LCR at some LHDs was much later than expected. Part of the difficulty was the changing over to a new database, but the complexity of the LCR also contributes to slowness in implementation.)

The 8/3/05 NOV warns Drummond Island Elementary School it will be fined \$200 "the next time that you fail to collect any required water sample." This does not conform with the state fine

policy which states that administrative fine determinations for violations in one contaminant group do not impact the amount of the administrative fines for violations in another group.

Based on the L/C sample results in WaterTrack for Drummond Island Elementary School, it appears that it never completed initial tap monitoring requirement by sampling during 2 consecutive 6-month CPs. The LHD confirmed this after the EV.

Per WaterTrack, the CHD is only requiring this system to collect 1 L/C sample per triennial CP. The LCR requires a system of this size to take a minimum of 5 samples when it is on reduced (annual, or triennial) monitoring, and this system apparently has more than 5 drinking fountains and kitchen faucets. **LHD response:** Conversion to WaterTrack issue. The facility was originally identified as having only 1 LCR sample. This has been corrected in the monitoring frequency to 5. (MDEQ advised R5 that the transition to WaterTrack from T2 involved a long period in late 2003 and early 2004 where LHDs had no access to a database and tracking system. Even after the arrival of WaterTrack in April 2004, there was a large backlog of data entry and updating of records that needed to be accomplished before LHDs could accurately track monitoring. That some LHDs were late in implementing the Minor Revisions to the LCR compounded the problems they experienced with monitoring in the first year of WaterTrack use.)

The 8/3/05 NOV letter should have instructed system to collect triennial L/C tap samples after it opens for the year, and before October 1.

The 1/15/05 NOV letter to Gibby's Sport Bar 7 Grill says the nitrate sample was due no later than 12/31/05. However, MDEQ's administrative fine policy and procedures for M/R violations states: "For annual or less frequent monitoring, deadlines should be established for submittal of results before the end of the monitoring period. This is necessary to minimize "federal" violations and balance tracking and laboratory work. For example, a water supplier on annual bacteriological monitoring (January 1, 1994 to December 31, 1994) may be required to submit the sample by November 1, 1994. Likewise, a supplier may be assigned a "monitoring period" of January 1, 1994 through December 31, 1994 for a VOC sample that is federally required to be collected on a three-year cycle. In either case, failure to collect the sample by the state/local established date may result in a reminder or warning of state/local enforcement action including fines. Note, however, that a federal violation is not reported to the federal reporting data system until the full monitoring cycle (one year or three years in the above examples) has expired and no sample has been collected."

The 1/15/05 NOV for Gibby's Sport Bar 7 Grill's 2004 nitrate violation and the 2004 CYQ 4 TCR M/R violation refers to the enclosed copy of the \$200 civil fine per each missed sample the facility will receive the next time it fails to collect any required water sample. This does not conform with the state fine policy which states that administrative

fine determinations for violations in one contaminant group do not impact the amount of the administrative fines for violations in another group.

A copy of the \$200 civil fine per each missed sample which the 1/15/05 NOV letter says is enclosed and will be issued to the system the next time it fails to collect any required water sample is not in the file.

The audit team made the following additional observations:

8/24/05 letter notifies system that the 5 samples it collected on 8/10/05 exceeded the lead action level (the 90th percentile lead level was .0235 ppm). It explains that only the tap in classroom 111 had a high lead level (.046 ppm), and the 4 others were either ND for lead or had only .001 ppm lead. It tells the system it does not have to provide any PN or posting at this time, presumably because the school was in summer recess. It recommends that, while not required at this time, for good public relations they may want to take the classroom 111 tap off-line until a safe sample is obtained.

The 8/24/05 letter also says the easiest and least costly solution would be to collect additional lead and copper samples from other taps at the school by 9/30/05 to try to lower the 90th percentile lead level below the lead action level. It says the additional taps that should be sampled for lead and copper are the 4 other drinking fountains in the school and 4 of the 13 additional taps in the school some of which are not used for drinking (bathroom sinks, janitor or mop sinks, hose bibs, etc.). It also told the system to sample the classroom 111 tap again. The system took 9 additional samples on 9/12/05.

The LHD should not encourage systems to collect more L/C samples just to avoid an action level exceedance.

MDEQ should change the way WaterTrack pulls results for the lead/copper analyte group so that only samples analyzed by analytical methods approved under the LCR are included. Results of IOC scans (which includes lead) should not be included as valid lead/copper samples.

(MDEQ advised R5 that the problem of IOC lead results appearing along with Corrosion Control lead results is a glitch that has existed since the beginning of WaterTrack, and it has yet to be fixed. Since most nontransient systems are collecting multiple Corrosion Control samples, and most successfully collect their required number, the chance of missing a Major M/R violation is relatively low. The glitch will be given priority status among new maintenance and enhancement items awaiting approval.)

Also, it appears that rather than taking samples at 8 additional taps, the system may have taken at least 1 sample from a tap that was already sampled on 8/10/05 (Kitchen West). Because the sampling point description in WaterTrack for 3 of the 8/10/05 samples is "classroom," (including the .046 ppm lead sample collected in classroom 111), it cannot be determined if the 9/12/05 samples from classrooms 108, 109, 115, and 118 are from different taps than two other 8/10/05 "classroom" samples. Also, sampling point information is not provided for one of the 9/12/05 samples. MDEQ and the LHDs should instruct systems not to collect more than one sample from the same drinking water tap if it has enough or more than enough drinking water taps to collect a L/C sample from the number of sites required by the LCR based on the number of people it serves. LHD

response: This is a WaterTrack issue. The paper copies (attached) show the room location, but the character field in WaterTrack truncates the sample location text. **R5 response:** A review of the paper copies provided indicates that in addition to the Classroom 111 tap which exceeded the lead action level on 8/10/05, 2 other taps were resampled on 9/12/05 (west kitchen and Classroom 115). A sample point description was not provided for one of the 9 samples taken on 9/12/05, so it cannot be determined if this was also a re-sample of one of the taps sampled on 8/10/05.

There was no documentation in the Drummond Island Elementary School file that the system took the classroom 111 tap off-line before the school year began and until the lead ND result was received for the 9/12/05 sample although this was recommended in the CHD's 8/24/05 letter. There was also no documentation provided by the system that would account for the difference in lead levels between the samples taken on 8/10/05 and 9/12/05 at this tap.

NOVs were issued for all 3 M/R violations which required the system to PN, enclosed an example PN for the system to use. However, they did not require the system to send back a signed copy of its PN.

Enforcement Data in SDWIS/FED

No discrepancies were noted.

Commendations and Recommendations

Commendations:

NOV letters for TCR MCL violation provides the system with very thorough instructions. It tells it that the water from the well must not be used for drinking water or other potable purposes until further notice from the CHD. It provides the system with three acceptable courses of action: 1) close and cease operations; 2) Use another nearby approved source of water; and 3) use temporary precautionary measures to protect public health. It says as per the MI SDWA, the CHD will allow limited use of the water supply on a temporary basis (not to exceed 90 days) with appropriate PN and precautionary measures. A one and a half page explanation of precautionary measures is provided.

Major Recommendations:

The DHD should ensure that systems provide written notification of corrective actions it took or equipment it used to resolve the problem, the supply was disinfected, and 2 safe water samples obtained required by NOVs for TCR MCL violations.

The DHD should document TCR repeat monitoring reminder letters in the system files.

Fine warnings in the CHD's NOV letters for M/R violation that warn systems they will be fined the next time it fails to collect a sample within a 12-month period should be changed to conform with the state fine policy which states that administrative fine determinations for violations in one contaminant group do not impact the amount of the administrative fines for violations in another group.

CHD needs to accurately track L/C initial tap monitoring and correctly assign systems to reduced annual and triennial monitoring.

CHD should establish deadlines before the end of the monitoring period for annual and less frequent monitoring to minimize federal violations and balance tracking and laboratory work as outlined in MDEQ's administrative fine policy and procedures. NOV letters issued for M/R violations should instruct systems to send back a copy of the signed/dated PN the system posted.

Minor Recommendations:

CHD should instruct schools not to conduct L/C sampling during summer recess to avoid getting unrepresentative high lead and copper results as a result of prolonged stagnation of water in the distribution system.

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
·		Pop.		Discrepancies	
MI1720553	Daily Bread	TN/80	4/2005 bacti	Yes, but a written	The 4/16/05 NOV letter notifies the system it is in violation based on a
	Restaurant		monthly	notification from the	3/31/05 TC+ routine sample and 4 4/4/05 TC+ repeat samples. It
			MCL	system required by	provides the system with very thorough instructions. It tells it that the
				the 4/16/05 NOV of	water from the well must not be used for drinking water or other potable
ļ			-	the corrective actions	purposes until further notice from the CHD. It provides the system with
				it took or equipment	three acceptable courses of action: 1) close and cease operations; 2) Use
·				it used to resolve the	another nearby approved source of water; and 3) use temporary
				problem, and that	precautionary measures (PMs) to protect public health. It says as per
				supply has been	the MI SDWA, the CHD will allow limited use of the water supply on a
				disinfected and 2 safe	temporary basis (not to exceed 90 days) with appropriate PN and PMs.
				water samples	
	:	·		obtained was not in	A one and a half page explanation of PMs is provided including:
				the file.	providing bottled or hauled water or another Type II water system;
					minimizing exposure by posting and disconnecting all drinking
				A copy of the PN	fountains, ice machines, and beverage machines from the water supply;
				signed by the system	implementing remedial action (conduct investigation of cause and
		1.		and dated 4/8/05	identify methods for correction; develop a plan to correct problem, and
				returned to the CHD	submit a written schedule to the CHD within 30 days detailing proposed
				is in the file	corrective work or equipment; and complete all corrective measures
					within 90 days. It also tells the system, if problem cannot be corrected,
					to complete the following to return the system to normal operations: 1)
					complete the corrections; 2) disinfect the entire water supply overnight
					if possible (by licensed well driller or other qualified individual
					recommended); 3) pump the supply to waste until all chlorine is
					removed from the system; 4) obtain two consecutive chlorine free ND
					bacti samples collected at least 24 hours apart, and 5) notify the CHD in
					writing of the corrective actions taken or equipment used to resolve the

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
					problem, that the supply has been disinfected and 2 safe water samples obtained.
					The NOV letter also tells the system that it must post each water outlet using the enclosed supply of PNs and it must sign and return one copy of the PN to the CHD immediately. A pre-paid envelope is included for the system to use.
					4/18/05 "MCL is Over; 5 Samples Needed for Next Month" letter confirms that after the MCL violation the system was treated and the 4/12 and 4/13 sample results were ND, and, therefore, the water is safe to use as usual. It instructs the system to take 5 bacti samples in 5/05, and that it may collect as many as 5 at the same time, as long as each sample is from a tap used for drinking (and not to use mop sinks or outside taps). The letter should have said that the system may collect as many as 5 at the same time, as long they are collected from different taps that are used for drinking. The CHD later corrected this language in the letters it sent on 12/13/05 following the 12/8/05 TC+ routine sample, and 1/23/06 following the 1/12/06 positive routine sample. **Corrected in future mailings.
					12/15/06 letter tells system to take 5 bacti samples in 1/06. It gives the system the option to collect more than 1 sample on the same day, as long as they are taken at different taps that can be used for drinking water, and instructs it not to sample from mop sinks, or outside hose bibs.

SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				1/23/06 letter tells system to take 5 bacti samples in 2/06 because one of 3 samples taken on 1/12/06 was TC+. It reminds the system to take 4 repeats immediately if any of the 5 samples it takes in 2/06 are positive. The repeats should all be taken on the same day, and at least one from the tap that had the positive.
				There was no documentation of the LHD's notification of the system to collect repeat samples following the 1/12/06 TC+ sample.
				2/16/06 "Increased Monitoring is Over – No Bacti Samples Needed Until April-June of 2006 quarter" returns the system to quarterly sampling. It recommends that the system collect its quarterly bacti sample during the first two weeks of the quarter, and partial chemistry sample at the beginning of the year, to avoid problems.
				S/F reporting issue – This MCL violation should have been entered for 3/05 instead of 4/05 because the routine total coliform positive sample was taken during 3/05 on 3/31/05. **By design, WaterTrack calculates an MCL using the repeat confirmation TC+ sample date. If the samples are collected over a two month period, the latter month is
				flagged for the MCL date (by design). MDEQ's 4/17/07 response: DEQ has been reporting bacti MCL violations based on the date of the second positive sample for more than ten years, with no prior concern being expressed by the Region. Changing WaterTrack to do otherwise would result in a significant financial cost during very tight budgetary times in Michigan. DEQ will review SDWIS/FED reporting requirements, consult with an IT professional, and make a decision on the priority of this relative to other badly needed enhancements.
	i	1 2	NAME Type/	NAME Type/ Flow Chart?/

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
					There are no bacti results in WaterTrack for the following quarters and violations for these quarter, have not been into S/F: Q1,2, and 3 of CY 2004. However, after the EV, the LHD advised R5 that the facility was not open to the public until 12/22/04.
MI1720514	Drummond Island Elementary School	NT/59	2002-2004 triennial LCR Reduced Tap M/R	No- The CHD should have sent the system a sample reminder and \$200 fine warning (R/FW) notice 30-90 days before the end of the compliance period (CP), assessed a \$200 fine for failure to sample by the end of the CP, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be assessed a \$400 fine if it fails to sample by this date. (The 8/3/05 NOV letter does note that "in part due to computer problems,	Based on the L/C sample results in WaterTrack for this system, it appears that it never completed initial tap monitoring requirement by sampling during 2 consecutive 6-month compliance periods. The LHD confirmed this after the EV. The 8/3/05 NOV letter asked the system to complete the enclosed form and send it to the CHD, so that the number of lead/copper samples required from the facility can be determined. This should have been done in 2001 when the LCR Minor Revisions were implemented by the MI Noncommunity program. MDEQ's 4/17/07 response: MDEQ agrees that implementation of the Minor Revisions to the LCR at some LHDs was much later than expected. Part of the difficulty was the changing over to a new database, but the complexity of the LCR also contributes to slowness in implementation. 8/24/05 letter notifies system that the 5 samples it collected on 8/10/05 exceeded the lead action level (the 90 th percentile lead level was .0235 ppm). It explains that only the tap in classroom 111 had a high lead level (.046 ppm), and the 4 others were either ND for lead or had only .001 ppm lead. It tells the system it does not have to provide any public notice or posting at this time, presumably because the school was in summer recess. It recommends that, while not required at this time, for good public relations they may want to take the classroom 111 tap off-line until a safe sample is obtained. The letter says the CHD spoke with

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID .	NAME	Type/		Flow Chart?/	
		Pop.	<u> </u>	Discrepancies	
				this monitoring	MDEQ staff who suggested the easiest and least costly solution would
				violation was not	be to collect additional lead and copper samples from other taps at the
,				noticed until now,	school by 9/30/05 to try to lower the 90 th percentile lead level below the
1				and the usual extra	lead action level. It says the additional taps that should be sampled for
				reminder notice from	lead and copper are the 4 other drinking fountains in the school and 4 of
				our office was not	the 13 additional taps in the school some of which are not used for
				sent.")	drinking (bathroom sinks, janitor or mop sinks, hose bibs, etc.). It also
				**WaterTrack only	told the system to sample the classroom 111 tap again. The system took
				works for monitoring	9 additional samples on 9/12/05.
				LCR when the correct	
				start year is entered	The LHD should not encourage systems to collect more L/C samples
				for the 3-year	just to avoid an action level exceedance. MDEQ's 4/17/07 response:
				window. The transfer	"MDEQ does not encourage systems to collect more samples just to
				from T2 to	avoid an action level exceedance. Rather, it is done for the purpose of
				WaterTrack did not	learning more about a potential contamination problem. If a system
				incorporate the	collects the chart number of samples and may exceed an action level our
				correct start year,	procedure requires them to sample all drinking water taps at the facility
		-		and it was not	to determine the scope of the problem, if they intend to use fixture
				determined in time to	replacement to address the elevated levels. If by the end of a 6-month
				trigger the reminder	sampling period, if 90% or more of the sampled taps are below the
·				notice. MDEQ	action level, then it would be no exceedance. MDEQ further expects
				4/17/07 response:	that fixtures and piping known to be a problem will be removed even
				The transition to	where the 90 th percentile does not exceed the action level.
				WaterTrack from T2	
				involved a long	MDEQ's early 2001 model letter, intended for LHDs to make use of if
				period in late 2003	they wish, says, 'It is highly recommended sampling be conducted and
				and early 2004 where	reported early in the monitoring period. Starting now will allow
				LHDs had no access	adequate time to comply with these complex regulations. Also, if initial

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	94
		Pop.		Discrepancies	
<u> </u>				to a database and	results indicate the action level would be exceeded for lead or copper,
				tracking system.	you will need to contact the (local health department) for further
				Even after the arrival	instructions and assistance before the monitoring period expires.'
]				of WaterTrack in	
				April 2004, there was	As always, if there is an exceedance at any one tap, MDEQ and the
				a large backlog of	LHDs expect all drinking water taps and source water to be sampled in
				data entry and	order to calculate the 90th percentile value. One might construe this as
	•			updating of records	sampling one's way back into compliance, but actually it is sampling for
:				that needed to be	the purpose of determining compliance."
	,			accomplished before	
:	·			LHDs could	There was no documentation in the file that the system took the
				accurately track	classroom 111 tap off-line before the school year began and until the
				monitoring. That	lead ND result was received for the 9/12/05 sample. There was also no
				some LHDs were late	documentation provided by the system that would account for the
				in implementing the	difference in lead levels between the samples taken on 8/10 and 9/12 at
				Minor Revisions to	this tap.
				the LCR compounded	
				the problems they	Also, it appears that rather than taking samples at 8 additional taps, the
				experienced with	system may have taken at least 1 sample from a tap that was already
				monitoring in the first	sampled on 8/10/05 (Kitchen West). Because the sampling point
				year of WaterTrack	description in WaterTrack for 3 of the 8/10/05 samples is "classroom,"
				use. The 8/3/05 NOV	(including the .046 ppm lead sample collected in classroom 111), it
				1	cannot be determined if the 9/12/05 samples from classrooms 108, 109,
				warns system it will be fined \$200 "the	115, and 118 are from different taps than two other 8/10/05 "classroom"
				I	samples. Also, sampling point information is not provided for one of the
				next time that you fail to collect any	9/12/05 samples. **This is a WaterTrack issue. The paper copies
				-	(attached) show the room location, but the character field in
	<u> </u>			required water	WaterTrack truncates the sample location text. R5 response: A

SYSTEM ID	SYSTEM NAME	System Type/	Violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
		Pop.		Discrepancies sample." This does not conform with the state fine policy which states which says "Administrative fine determinations for violations in one contaminant group (Table 1) do not impact the amount of the administrative fines for violations in another group.) The 8/3/05 NOV letter requires the system to post the PN provided, and to return a signed copy within 30 days. A copy of the PN signed by the system and dated 9/1/05 is in	review of the paper copies provided indicates that in addition to the Classroom 111 tap which exceeded the lead action level on 8/10/05, 2 other taps were re-sampled on 9/12/05 (west kitchen and Classroom 115). A sample point description was not provided for one of the 9 samples taken on 9/12/05, so it cannot be determined if this was also a re-sample of one of the taps sampled on 8/10/05. MDEQ and the LHDs should instruct systems not to collect more than one sample from the same drinking water tap if it has enough or more than enough drinking water taps to collect a L/C sample from the number of sites required by the LCR based on the number of people it serves. MDEQ 4/17/07 response: MDEQ agrees that communication about where to collect samples need to improve. Per WaterTrack, the CHD is only requiring this system to collect 1 L/C sample per triennial compliance period. The LCR requires a system of this size to take a minimum of 5 samples when it is on reduced (annual, or triennial) monitoring, and this system apparently has more than 5 drinking fountains and kitchen faucets. **Conversion to WaterTrack issue. The facility was originally identified as having only 1 LCR sample. This has been corrected in the monitoring frequency to 5. MDEQ's 4/17/07 response: The transition to WaterTrack from T2 involved a long period in late 2003 and early 2004 where LHDs had no
	í			the file.	access to a database and tracking system. Even after the arrival of WaterTrack in April 2004, there was a large backlog of data entry and updating of records that needed to be accomplished before LHDs could accurately track monitoring. That some LHDs were late in implementing the Minor Revisions to the LCR compounded the

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
					problems they experienced with monitoring in the first year of WaterTrack use.
					The 8/3/05 NOV letter should have instructed system to collect triennial L/C tap samples after it opens for the year, and before October 1.
					R5 recommends that MDEQ and the contracted local health departments require systems that miss a triennial sample to sample the following year instead of giving the system until the end of the next triennial CP to sample.
					MDEQ should change the way WaterTrack pulls results for the Lead/Copper analyte group so only samples analyzed by analytical methods approved under the LCR are included, and stop including the results of IOC scans (which includes lead). MDEQ's 4/17/06 response: The problem of IOC lead results appearing along with Corrosion Control lead results is a glitch that has existed since the beginning of WaterTrack, and it has yet to be fixed. Since most nontransient systems are collecting multiple Corrosion Control samples, and most successfully collect their required number, the chance of missing a Major M/R violation is relatively low. The glitch will be
1.611.7000.45					given priority status among new maintenance and enhancement items awaiting approval.
MI1720045	Gibby's Sport Bar 7 Grill	TN/64	2004 Nitrate M/R	No- The CHD should have assessed a \$200 fine for failure to sample by the end of	After the EV, the UP District Office forwarded annotated reminder notice printouts from WaterTrack which indicate that a bacti/nitrate sample reminder notice postcard was sent to the system around 11/24/04, and a reminder phone call was made around 12/14/04. The

SYSTEM ID	SYSTEM NAME	System Type/	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
		Pop.		the CP, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be	template for the postcard was also forwarded which says the system must collect a bacti and nitrate sample by 12/31/04 and failure to sample can result in a \$200 fine. The 1/15/05 NOV letter also reminds the system to collect its bacti sample for the quarter and nitrate sample for the year. It says the bacti sample is due no later than 3/21/05. It recommends that the system
				assessed a \$400 fine if it fails to sample by this date. The 1/15/05 NOV for this violation and the CQ4/O4 bacti M/R violation refers to the	collect all water samples at the beginning of the quarter or the year, to avoid problems. It says the nitrate sample is due no later than 12/31/05. However, the state civil fine policy says: "For annual or less frequent monitoring, deadlines should be established for submittal of results before the end of the monitoring period. This is necessary to minimize "federal" violations and balance tracking and laboratory work. For example, a water supplier on annual
				enclosed copy of the \$200 civil fine per each missed sample the facility will receive the next time it fails to collect any required water sample. This does not conform with the	bacteriological monitoring (January 1, 1994 to December 31, 1994) may be required to submit the sample by November 1, 1994. Likewise, a supplier may be assigned a "monitoring period" of January 1, 1994 through December 31, 1994 for a VOC sample that is federally required to be collected on a three-year cycle. In either case, failure to collect the sample by the state/local established date may result in a reminder or warning of state/local enforcement action including fines. Note, however, that a federal violation is not reported to the federal reporting
				state fine policy which states "Administrative fine determinations for	data system until the full monitoring cycle (one year or three years in the above examples) has expired and no sample has been collected." A copy of the \$200 civil fine per each missed sample which the 1/15/05

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				violations in one contaminant group (Table 1) do not impact the amount of the administrative fines for violations in another group.	NOV letter says is enclosed and will be issued to the system the next time it fails to collect any required water sample is not in the file. The NOV letter appears to require the system to post PN within 30 days, which is more stringent than MI SDWA Rule 325.10404(2)(a) which requires water systems to provide public notice not later than 1 year after the water system learns of the violation.
				The NOV letter requires the system to post the enclosed separate PNs for the bacti and nitrate M/R violations, and send signed copies within 30 days. Signed copies of the PNs dated 2/3/05 were in the file.	
			10-12/04 TCR M/R	Yes The NOV letter requires the system to post the enclosed separate PNs for the bacti and nitrate M/R violations, and send signed copies within	

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				30 days. Signed	
				copies of the PNs	
				dated 2/3/05 were in	
				the file.	

^{**}LHD comments on the draft EV chart (in italics)

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Appendix G LMAS DHD

Summary of EV Findings and Region 5 Commendations and Recommendations

TCR MCL Violation Follow-Up

The audit team reviewed follow-up for 1TCR MCL violations at USFS-Autrain Lake Campground. The audit team found the DHD followed its procedures for this violation. However, the following problems were noted:

USFS-Autrain Lake Campground

The PN sent with the 8/11/05 NOV says the MCL for total coliform bacteria as "1 colony/100 ml." However, this is not how the MCL is currently defined. This needs to be corrected in the PNs that are sent with NOV letters.

8/8/05 repeat sample reminder letter does not give the location or date of the positive sample for which the repeat samples must be collected.

The 8/11/05 MCL NOV letter warns system that failure to post PN is subject to a \$200 administrative fine instead of a \$1,000 per day up to the maximum amount of fine per violation of \$2,000 (for water systems that serve 10,000 or fewer people) as required under the State Administrative Fines Policy

The 8/11/05 MCL NOV letter should not warn the system it is subject to a \$200 civil fine if it fails to submit disinfection reports because this is not one of types of periodic reports included in MDEQ's policy and procedures for administrative fine policy and procedures.

The audit team made the following additional observations:

The NOV letter should have told the system to collect 5 routines samples in September instead of October. However, the 8/18/05 letter discussed below correctly told the system to take these samples in September.

10/4/05 letter to system regarding "Following Month Data: 9/6/05 Result 5/5 ND" says based on these results it appears repairs have resolved the issue, and system may return to routine quarterly TCR and annual partial chemistry monitoring. It says system's next 2 TCR samples are due prior to opening in 2006.

The 8/11/05 NOV letter for the MCL violation August 2005 TCR monthly MCL refers to the special purpose samples taken to check the success of disinfection as "repeat" samples instead of "check" samples. Also, it refers to the 5 TCR samples systems must collect the next month they provide water to the public after one or more total coliform-positive samples "additional follow-up" TCR samples instead of routine samples. (MDEQ advised R5 that MDEQ agrees the various types of samples should be called by the appropriate name in order to avoid confusion.)

4.2.5.2 M/R Violation Follow Up

The audit team reviewed follow-up for 4 M/R violations (2 TCR, and 2 nitrate). The audit team found the CHD generally followed its procedures for 1 of the TCR M/R violations. The team found the following problems with the other 3 cases:

The DHD should have sent Bob-Lo Tavern a reminder notice at least 30 days before the end of 2004 TCR annual CP warning of a \$200 fine if system fails to sample by the end of the CP.

The DHD should have sent Bob-Lo Tavern a reminder notice at least 30 days before the end of the 2004 nitrate annual CP warning of a \$200 fine if system fails to take its nitrate sample by the end of the CP, and fined the system after it failed to sample. It appears that the civil fine attached to the 4/20/05 NOV, which was issued for both the 2004 Nitrate M/R and 2004 CYQ 4 TCR M/R violations, was only issued for the 2004 CYQ 4 TCR M/R violation.

A formal NOV and request for informal conference should have been issued to Bob-Lo Tavern within 30 days after its 2004 nitrate M/R violation because it was a nitrate M/R SNC.

LHD should have first sent a reminder notice at least 30 days before the end of the 2005 nitrate annual CP warning of a \$200 fine if system fails to sample by the end of the CP, and fined the system after it failed to sample. 2/6/06 NOV letter says the DHD will allow a one time "I forgot" and the fine will be rescinded for the missed 2005 nitrate sample.

The 2/6/05 NOV issued to Bob-Lo Tavern tells the system to submit results for 2 TCR samples and a nitrate sample to be taken prior to opening in 2006. It warns system that future missed samples will result in issuance of applicable \$200 or \$400 civil fines. The system collected 2 TCR samples and a nitrate sample on 4/17/06.

The audit team made the following additional observations:

The 4/20/05 NOV issued to Bob-Lo Tavern should have cited the system for a 2004 annual TCR instead of a 2004 CYQ 4 TCR M/R violation (it was also issued for the 2004 annual nitrate M/R violation.), and the civil fine attached to the NOV letter should have been for a 2004 annual TCR instead of a 2004 CYQ 4 TCR M/R violation.

The \$200 fine issued to Cedarville Headstart is earlier than issuing a fine for a second violation as outlined in MDEQ's administrative fines policy and procedures. According to SDWIS/FED this was the system's first TCR M/R violation for the 12-month period from 10/1/03 to 9/30/04. Under MDEQ's administrative fine policy and procedures, the systems should be issued a written warning instead of a \$200 fine for the first missed quarterly sample in a 12-month period.

The warning in the 8/11/05 MCL NOV letter to USFS-Autrain Lake Campground that systems are subject to a \$200 fine if they fail to collect 5 routine samples the next month after one or more total coliform-positive samples is earlier than issuing a fine for a second violation as outlined in MDEQ's administrative fines policy and procedures. The 8/18/05 letter's warning that failure to collect 4 repeat samples will result in a \$200 fine,

is earlier than issuing a fine for a second violation as outlined in MDEQ's administrative fines policy and procedures. (MDEQ advised R5 that The Michigan Safe Drinking Water Act (SDWA), Rule 325.1007 (2) (a), states, merely, the Department may impose a \$200 fine for failure to collect a water sample under this act. "Under this act," of course, includes the rule(s) where the Department can establish any monitoring requirement at least as stringent as the minimum requirements established in the Act. Relative to this, the Fines Policy offers further guidance for administering fines. Issuing a fine after the first quarterly monitoring violation or after a missed deadline established prior to the end of a quarter may not be included in the Fines Policy, but it does not exceed the authority of the SDWA.)

NOVs were issued for all 4 M/R violations which required the system to PN, and enclosed an example PN for the system to use. However, they did not require the system to send back a signed copy of its PN.

Enforcement Data in SDWIS/FED

It appears that the 4/20/05 SFM linked to the 2004 nitrate M/R violation in SDWIS/FED should not have been entered into SDWIS/FED for this violation because it was issued for a 2004 CYQ 4 TCR M/R violation (which was actually a 2004 annual TCR M/R violation).

An 8/16/05 SOX has been linked to Bob-Lo Tavern's 2003 nitrate M/R violation. However, the system did not RTC by collecting a nitrate sample until 4/17/06.

There were no TCR results in WaterTrack for Cedarville Headstart for the following quarters and violations for these quarters have not been entered into SDWIS/FED: 2003 CYQ 1, 2, 3, and 2005 CYQ 3. **LHD response:** The sample results are available and were entered into WaterTrack. No M/R violation during this period.

R5 response: 2005 CYQ 1 and 2 results were entered into WaterTrack after the EV but there were still no results for 2003 CYQ 3 or 2005 CYQ 3.

MDEQ's 4/17/07 response: In fact, the water system is a seasonal system and is closed during the 3rd quarter. The LHD will be advised to change the facility information in WaterTrack to

accurately show the operational season. **R5 response:** The violations should be deleted from SDWIS/FED.

Commendations and Recommendations

Commendations:

The DHD's NOV letters for TCR MCL violations are very thorough with the exception that it does not require the system to provide an alternate source of drinking water. The PN sent with the letter, however, does say "a supply of drinking water meeting drinking water standards is being made available for you while corrections are made in the system."

The DHD requires seasonal systems to collect TCR samples prior to opening for the season.

Major Recommendations:

The DHD should issue monitoring reminder and \$200 fine warning notices 30-90 days before the end of the CP for annual and less frequently scheduled monitoring. The DHD should issue a \$200 fine to systems that fail to sample, set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warn the system it will be assessed a \$400 fine if it fails to sample by the new date.

DHD should remove the fine warning for failure to submit disinfection reports from NOVs for TCR MCL violations because this is not one of types of periodic reports included in MDEQ's administrative fine policy and procedures.

The DHD should issue a formal NOV and request for informal hearing within 30 days after a system is identified as an MR SNC.

DHD should correct the amount of fine warning for failure to post PN in its NOV letters of MCL violations from \$200 to \$1,000 per day up to the maximum amount of fine per violation of \$2,000 (for water systems that serve 10,000 or fewer people).

The DHD should cite the correct duration of TCR M/R violations in NOV letters and fine citations.

NOV letters issued for M/R violations should instruct systems to send back a copy of the signed/dated PN the system posted.

The DHD should not enter a SOX date for a nitrate M/R violation which precedes the date of the system's next sample.

DHD should only link a state administrative penalty (SFM) to the violation(s) for which it was issued.

Minor Recommendations:

The DHD should replace the out of date total coliform bacteria MCL definition in example PNs it sends with NOVs for TCR MCL violations with the definition under the Total Coliform Rule.

The DHD's repeat sample reminder letters should identify the location and date of the positive routine sample. After the EV, the DHD advised R5 that future letters will identify the TC+ sample location.

The DHD should include the state requirement to provide an alternate source of drinking water in the TCR MCL NOV letters themselves, instead of only in the example PNs sent with the letters.

The DHD should delete the quarterly TCR M/R violations for which MDEQ determined after the EV that the system is a seasonal system that is not open during the quarter the violations were assigned.

Luce-Mackinac-Alger-Schoolcraft District Health Department

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/ Pop.		Flow Chart?/	
MI0220006	USFS-Autrain Lake Campground	TN/60	8/05 bacti monthly MCL	Discrepancies Yes A copy signed and dated by the owner on 8/17/05 is in the file.	The 8/11/05 NOV letter for the MCL violation is very thorough, except that it does not tell the system to provide an alternate source of drinking water. The PN sent with the letter, however, does say "a supply of drinking water meeting drinking water standards is being made available for you while corrections are made in the system." R5 recommends that this state requirement be included in NOVs issued for bacti MCL violations.
					The NOV letter tells the system to take the well out of service by removing pump handle, and to post enclosed PNs that say the water is not be consumed as long as violation exists, and submit a signed copy by 8/21/05. It warns that failure to post PN is subject to a \$200 fine. It also tells the system to initiate an investigation to determine cause which may include additional sampling; and initiate appropriate corrective actions per the investigation or noted in most recent sanitary survey. It tells the system to have a licensed well driller disinfect the well using the displacement method unless the DHD approves another proposed method, and requires system to submit enclosed disinfection report by 8/31/05 to verify disinfection has been completed. It warns that failure to submit this report is subject to a \$200 civil fine. It requires system to collect and submit results by 9/7/05 for at least 2 repeat bacti samples taken at least 8 hours apart after the disinfectant is flushed from the distribution system. It tells the system that it may not be put back into service for the public until the LHD has given approval. It tells the system to collect 5 additional follow-up bacti samples during October of 2005 and warns that failure to do so is subject to a \$200 fine. It says routine sampling may be resumed if all the samples are non-

Luce-Mackinac-Alger-Schoolcraft District Health Department

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
<u> </u>					detect.
					The NOV letter should have told the system to collect 5 routines samples in September instead of October. However, the 8/18 letter discussed below correctly told the system to take these samples in September.
					R5 recommends that the DHD refer to the special purpose samples taken to check the success of disinfection as "check" samples instead of repeat samples to distinguish them from repeat samples required by federal and state regulation following positive routine and repeat samples. Also, the 5 bacti samples systems must collect the next month they provide water to the public after one or more total colifom-positive samples should be referred to as routine instead of "additional follow-up" bacti samples so they are not confused with check samples following disinfection.
					The PN sent with the 8/11/05 NOV says the MCL for total coliform bacteria as "1 colony/100 ml." However, this is not how the MCL is currently defined. This needs to be corrected in the PNs that are sent with NOV letters.
					8/8/05 letter to system instructs it to collect 4 repeat samples by the end of the next business day of receipt of the letter, one from the original sampling site, one from an upstream site, 1 from a downstream site, and one from site nearest the well; or if only 1 tap is available all at this site. It warns system that failure to collect these will results in a \$200 fine and/or other enforcement action as necessary. The letter does not give

Luce-Mackinac-Alger-Schoolcraft District Health Department

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
					the location or date of the positive sample for which the repeat samples must be collected. **Future letters will identify the TC+ sample location.
					8/18/05 letter to system regarding "After Repair Collection Date: 8/10/05 Result 4/4 ND" confirms the samples the system took to check success of disinfection were non-detect, and tells system to take 5 additional follow up samples during September from 5 different taps on the same day.
	-				The 8/18/05 letter also instructs the system that if an MCL violation occurs it will have 3 options: 1) close and cease operations, 2) connect to an approved alternate on-site source, or 3) use temporary precautionary measures (PMs) to protect public health during the problem resolution including using bottled water for drinking purposes, post public health advisory notices at all water outlets, and disinfect the well and water system.
					The 8/11/05 MCL NOV letter should warn that failure to post PN is subject to a \$1,000 administrative fine instead of a \$200 civil fine.
					The 8/11/05 MCL NOV letter should not warn the system it is subject to a \$200 civil fine if it fails to submit disinfection reports because this is not one of types of periodic reports included in the state's civil fine policy.
					The 8/11/05 MCL NOV letter's warning that systems are subject to a \$200 fine if they fail to collect 5 routine samples the next month they

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
					provide water to the public after one or more total colifom-positive samples exceeds the authority of the state civil fine policy unless this would be the system's second bacti monitoring violation within a 12-month period. The 8/18/05 letter's warning that failure to collect 4 repeat samples will result in a \$200 fine, exceeds the authority of the state civil fine policy unless this would be the system's second bacti monitoring violation within a 12-month period.
·					MDEQ's 4/17/07 response: The Michigan Safe Drinking Water Act (SDWA), Rule 325.1007 (2) (a), states, merely, the Department may impose a \$200 fine for failure to collect a water sample under this act. "Under this act," of course, includes the rule(s) where the Department can establish any monitoring requirement at least as stringent as the minimum requirements established in the Act. Relative to this, the Fines Policy offers further guidance for administering fines. Issuing a fine after the first quarterly monitoring violation or after a
					missed deadline established prior to the end of a quarter may not be included in the Fines Policy, but it does not exceed the authority of the SDWA.
1 1 1 1					R5 Recommendation: MDEQ's administrative fines policy and procedures should be updated to clarify that it allows warnings and/or fines for the first monitoring violation in a 12-month period.
					10/4/05 letter to system regarding "Following Month Data: 9/6/05 Result 5/5 ND" says based on these results it appears repairs have resolved the issue, and system may return to routine quarterly bacti and

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
					annual partial chemistry monitoring. It says system's next 2 bacti samples are due prior to opening in 2006. R5 commends the LMAS DHD for requiring seasonal systems to collect bacti samples prior to opening for the season.
MI4920482	Bob-Lo Tavern	TN/30	2004 TCR M/R	No- It appears that the 4/20/05 NOV was mistakenly issued for a Q4/04 bacti M/R violation (This NOV letter was also issued for the 2004 annual nitrate M/R violation.) It also appears that the civil fine attached to the NOV letter was issued for a Q4/04 bacti M/R violation. But the system actually had an annual bacti M/R violation. The DHD should have sent a reminder notice at least 30 days before the end of the annual compliance period warning of a \$200	5/17/05 letter to system rescinds the fine because the system has been closed since 2003 and is currently in foreclosure (per owner on 4/28/05). There is no 2003 nitrate sample result in WaterTrack, and there is a 2003 nitrate M/R violation in S/F with a 1/5/04 state administrative penalty (SFM) and state PN request (SIE) linked to it. At the time of the EV there was also a 5/4/05 state unresolved (SO7) linked to it. These files were not reviewed for this violation during the EV because it preceded the review period for TNCWSs. The SO7 has since been removed from S/F and an 8/16/05 SOX has been linked to this violation. However, the system did not RTC by collecting a nitrate sample until 4/17/06.

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
,		•		fine if system fails to	
				sample by the end of	
				the compliance	
				period.	
	+			The NOV letter tells	π
				the system to post the	
				attached PN for at	
				least 7 days and until	
				the samples have	
				been collected.	
				However, it does not	
				instruct the system to	·
				send back a copy of	
				the PN it posts. A	
				copy of the PN the	
				system posted is not	
				in the file.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			2004 Nitrate	No-It appears that the	It appears that the 4/20/05 SFM should not have been entered into S/F
			M/R	civil fine attached to	for this violation because it was issued for a Q4/04 TCR M/R violation
				the 4/20/05 NOV	(which was actually a 2004 annual TCR M/R violation).
				letter, which was	
		-		issued for both this	
				violation and a Q4/04	
				bacti M/R violation,	
				was only issued for	
				the Q4/04 bacti M/R	
				violation. The DHD	
				should have sent the	

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				system a reminder notice at least 30 days before the end of annual compliance period warning of a \$200 fine if system fails to sample by the end of the compliance period, and fined the system after it failed to sample.	
				An NOV and request for informal conference should have been issued within 30 days because the system was a nitrate M/R SNC.	
				The NOV letter tells the system to post the attached PN for at least 7 days and until the samples have been collected.	

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				However, it does not	
				instruct the system to	
				send back a copy of	
·				the PN it posts. A	
				copy of the PN the	
				system posted is not	
			200527	in the file.	The 2/6/06 NOV letter tells the system to submit results for 2 bacti
			2005 Nitrate	No- LHD should	samples and a nitrate sample to be taken prior to opening in 2006. R5
			M/R	have first sent a	commends the LMAS DHD for requiring seasonal systems to collect
				reminder notice at	bacti samples prior to opening for the season. It warns system that
				least 30 days before the end of the 2005	future missed samples will result in issuance of applicable \$200 or \$400
				nitrate annual	civil fines. The system collected 2 bacti samples and a nitrate sample
					on 4/17/06.
				compliance period warning of a \$200	011 4/1 //00.
		•		fine if system fails to	
*				sample by the end of	
				the compliance	
				period, and fined the	
	-			system after it failed	
				to sample.	
				to sample.	
			·	2/6/06 NOV letter	
				says the DHD will	
				allow a one time "I	
				forgot" and the fine	
				will be rescinded for	
				the missed 2005	

SYSTEM SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies nitrate sample.	OTHER OBSERVATIONS AND COMMENTS
MI4920408 Cedarville Headstart	NT/36	7-9/04 TCR M/R	Yes*-11/3/04 NOV and \$200 civil fine. The \$200 fine is earlier than issuing a fine for a second violation as outlined in MDEQ's administrative fines policy and procedures. According to S/F this was the system's first bacti M/R violation for the 12-month period from 10/1/03 to 9/30/04. Under the state civil fine policy, the systems should be issued a written warning instead of a \$200 fine for the first missed quarterly sample in a 12-month period. The NOV letter tells	*MDEQ's 4/17/07 response: The Michigan Safe Drinking Water Act (SDWA), Rule 325.1007 (2) (a), states, merely, the Department may impose a \$200 fine for failure to collect a water sample under this act. "Under this act," of course, includes the rule(s) where the Department can establish any monitoring requirement at least as stringent as the minimum requirements established in the Act. Relative to this, the Fines Policy offers further guidance for administering fines. Issuing a fine after the first quarterly monitoring violation or after a missed deadline established prior to the end of a quarter may not be included in the Fines Policy, but it does not exceed the authority of the SDWA. There were no bacti results in WaterTrack for the following quarters and violations for these quarters have not been entered into S/F: CQ 1, 2, and 3/2003, and CQ3/2005. **The sample results are available and were entered into WaterTrack. No M/R violation during this period. R5 response: CQ 1 and 2/2005 results were entered into WaterTrack after the EV but there were still no results for CQ3 or 2003 and 2005. MDEQ's 4/17/07 response: In fact, the water system is a seasonal system and is closed during the 3 rd quarter. The LHD will be advised to change the facility information in WaterTrack to accurately show the operational season. R5 response: The violations should be deleted from S/F.

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				the system to post the	·
				attached PN, but does	
				not instruct it to send	
				back a signed/dated	
				copy of the PN it	
l			E	posts.	

^{**}LHD comments on the draft EV chart (in italics)

Appendix H Marquette CHD

Summary of EV Findings and Region 5 Commendations and Recommendations

TCR MCL Violation Follow-Up

The audit team reviewed follow-up for 3 monthly TCR MCL violations at 2 systems (2 at Tilden Township Hall and 1 at Tilden Magnetite Partnership). The audit team found the CHD generally followed its procedures for 1 of the 2 MCL violations at Tilden Township Hall, and the violation at Tilden Magnetite Partnership. The following problems were found with the other violation:

A copy of the PN for Tilden Township Hall's October 2005 TCR monthly MCL signed by system was not in the file. The NOV letter issued for this violation does not tell the system to send a signed/dated copy of the PN it posts to the CHD.

The audit team made the following additional observations:

The NOV letters for TCR MCL violations gives the system 3 options: close, use an approved alternate nearby water source, or use temporary precautionary measures until the problem can be corrected.

According to the lab slips in the file, the 11/9/04 TC+ routine sample at Tilden Township Hall was a "raw well" sample and 2 of the five TC+ repeats samples (4 taken on 11/10/04 and 1 on

1/12/04), were also "raw well" samples.

Tilden Township Hall collected its November 2004 and October 2005 routine sample from the raw water tap instead of from a distribution system tap as required.

It appears from results in WaterTrack that Tilden Township Hall disinfected the system following the November 2004 and October 2005 TCR monthly MCL based on 2 ND check samples taken on 2 successive days. However, this is not documented in the file.

The NOV letters for TCR MCL violations do not tell the system to send a signed/dated copy of the PN it posts to the CHD. However, a copy of the PN signed by the system was in the file for 2 of the 3 MCL violations. If the system did not PN for the October 2005 TCR monthly MCL violation, it should have been fined \$1,000 per day up to the maximum amount of fine per violation of \$2,000 under MDEQ's policy and procedures for administrative fines for M/R violations and violations of state drinking water standards.

Lab slips were in the Tilden Magnetite Partnership file for a TC+ sample taken on 9/4/03 at the nurses station-pit, and 4 repeat samples taken on 9/6/03 3 of which were TC+ including one taken at the nurses station-pit. A lab slip for a TC+ sample taken on 9/29/03 was also in the file. However, these sample results were not in WaterTrack. **LHD response:** Correct, but samples are now entered into WaterTrack. **R5 response:** As of 3/31/08 these sample results are still not in WaterTrack.

There were no TCR results for CQ2/04 in WaterTrack when Region 5 printed sample results on 5/26/06 to bring on the EV. However, a ND 5/10/04 TCR sample result was entered into WaterTrack after the EV.

It appears that Tilden Magnetite Partnership should have been issued a TCR minor repeat (type 26) violation following the 9/29/05 TC+ routine sample because it took 2 repeat samples on 10/1/05, and 2 on 10/2/05, instead of taking all 4 on 10/2/05.

9/15/03 letter to Tilden Magnetite Partnership confirms completion of investigation, disinfection, and successful sampling into compliance for the 9/4/05 MCL violation. It says the investigation could not determine the cause of the TC+ samples prior to disinfection, and requires 5 routine samples during October 2003. It state these samples may be collected from the same tap at the same time. However it appears that this system has at least two distribution system sampling sites (the kitchen sink, and nurses stationpit), and therefore is required to either collect samples at regular time intervals throughout the month, or, because it uses only ground water that is not under the direct influence of surface water, and serves 4,500 persons or fewer people, collect all required samples on a single day if they are taken from different sites. After the EV, the LHD advised R5 that it will address this issue in future correspondence. LHD response: LHD was lead to believe one sample location was proper. LHD will address this issue in future correspondence.

The 9/15/03 letter also places the system on quarterly TCR monitoring frequency as a result of the TC+ results. However, according to WaterTrack the system had already been placed on quarterly TCR monitoring frequency in 1997.

M/R Violation Follow Up

The audit team reviewed follow-up for 4 M/R violations (2 TCR, and 1 IOC, and 1 LCR initial tap). The audit team found the CHD generally followed its procedures for the 2 TCR M/R violations. The team found the following problems with the other 2 cases:

An NOV should not have been issued to Empire Mine for a 7-12/03 LCR M/R violation because systems are not required to conduct L/C monitoring following an action level exceedance. Systems can voluntarily monitor before they complete corrosion control treatment installation steps, however, and can discontinue installation steps if they collect the standard number of samples based on population (20 for Empire Mine) that are below the action levels for during 2 consecutive 6-month CPs.

CHD should have sent Tilden Magnetite Partnership a sample reminder and \$200 fine warning notice approximately 30 days before the end of the CP, assessed a \$200 fine for failure to sample for IOCs by the end of the 2002-2004 IOC M/R CP, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be assessed a \$400 fine if it fails to sample by this date.

The audit team made the following additional observations:

The warning in the 1/17/06 NOV for Tilden Township Hall's December 2005 TCR minor M/R violation that it will be fined \$200 if it fails to collect a January 2006 TCR sample, or any other sampling events in a 12-month period, and \$400 for any other subsequent failures in the next 12 months does not conform with the state fine policy. The policy states administrative fine determinations for violations in one contaminant group do not impact the amount of the administrative fines for violations in another group.

The CHD should have charged Tilden Township Hall with a TCR minor repeat (type 26) violation for only collecting one repeat sample from the raw water tap on 10/10/05 following the TC+ 10/6/05 routine sample from the raw water tap. **LHD response:** Correct, a violation was not entered into WaterTrack. The facility claims it collected all of the required results but only submitted to the LHD one of the four repeat sample results that showed a TC+ result. The facility is currently searching for the remaining sample results. If they are not found and submitted to the LHD, then a violation will be entered in WaterTrack.

R5 response: As of 3/31/08 additional 10/10/05 TCR samples results had not been entered into WaterTrack, and a type 26 violation had not been entered into SDWIS/FED.

There were no CQ2/04 TCR results for Tilden Township Hall in WaterTrack when Region 5 printed sample results on 5/26/06 to bring on the EV. However, a ND 5/10/04 TCR sample result was entered into WaterTrack after the EV.

The NOV for St. Louis the King's 1st half/2005 semi-annual TCR M/R violation should have said the system failed to sample during the 1st half of 2005 instead of the April-June quarter of 2005 because the system was on a semi-annual TCR monitoring frequency.

The CHD increased St. Louis the King's TCR monitoring frequency from semi-annual to quarterly in the 7/12/05 NOV because it failed to sample during the 1st half/2005.

It appears that the 4/3/01 letter to Empire Mine should not have placed the system on triennial monitoring because the system had not collected 2 rounds of annual samples that were below the action levels after it completed initial tap monitoring. Also, the letter is incorrect in requiring 20 L/C samples for triennial monitoring for a system with a population of 1,000. A system with this population that is conducting reduced monitoring (annual or triennial) would only be required to collect 10 L/C samples.

MDEQ needs to clarify the procedures for semi-annual TCR, L/C, etc. monitoring at NCWSs under MDEQ's administrative fine policy and procedures. MDEQ's policy and procedures for administrative fines for M/R violations prescribes different procedures for sampling events required once per year or less frequently, and for sampling events required more frequently than once per year. Semi-annual monitoring would fall under the procedures for sampling events required once per year or less frequently. However,

the "Civil Fines for Failure to Monitor" flow chart that MDEQ included in the package of information for implementation of administrative fines sent to LHDs in July 1997 suggests that semi-annual monitoring should be handled under the procedures for sampling events required more frequently than once per. The footnote for the "No sample/End of Monitoring period=Issue \$200 fine" step of the flow chart reads: "For quarterly or more frequent monitoring only, a written warning (in lieu of first fine) is issued with PN and FRDS." (MDEQ advised R5 that MDEQ agrees that neither document specifically addresses which fines procedure should be used with cases of missed 6-month monitoring schedules. Either approach, warning after the first M/R violation or fining after the first M/R violation, is admissible under the Michigan Safe Drinking Water Act (SDWA), PA 399, 1976. It can be left to the judgment of the LHD as to which approach is most appropriate in a given situation.)

NOVs were in the files for all 4 of the M/R violations which required the system to PN, enclosed an example PN for the system to use, and required the system to send back a copy of the signed/dated PN it posted, and a copy was in all the files.

Copper Action Level Exceedance Follow-Up

The audit team reviewed follow-up for 1 copper action level exceedance at Empire Mine. The audit team found the DHD did not follow its procedures for the 2nd half of 1999 lead action level exceedance (should have been reported to SDWIS/FED for the 2nd half of 2000). The following problems were found:

It appears that the CHD did not contact the system regarding the action level exceedance until approximately 4 months after the end of the CP during which it occurred.

The 4/29/01 letter should have required the system to collect L/C samples from all drinking water taps by 12/31/01 (end of the next 6-month CP) instead of only 20 during the 1st and 2nd half 2002 CPs.

The 4/29/01 or later written communications with the system also should have required the system to report the results from its treatment study to the CHD every 6 months following the system's notice of intent to conduct a treatment study.

The audit team made the following additional observations:

The system submitted a written proposal to conduct a treatment study on 8/24/01. In its 1/19/02 letter the system summarized the results of L/C samples it collected from its 59 drinking fountains that were collected during 2001. This letter says the 18 fountains that had copper and/or lead concentrations above the action levels will be removed from service, beginning immediately with completion expected by 6/1/02. The system states in both the 8/24/01 and 1/19/02 letters that it will report to the CHD every 6 months on the results of their fixture repair or replacement and the proposed schedule for completing the entire program until the action levels are met. However, there is no documentation in the file that these 18 fountains were removed, or that the additional 9 fountains which were sampled during 2002 and the 1st half of 2003 that had results above the copper or lead action levels were removed.

Enforcement Data in SDWIS/FED

Empire Mines copper action level exceedance should have been reported to SDWIS/FED for the 2nd half of 2000 instead of for the 2nd half of CY 1999.

Commendations and Recommendations

Commendations:

The CHD issues NOVs for TCR MCL violations which give systems 3 options: close, use an approved alternate nearby water source, or use temporary precautionary measures until the problem can be corrected.

The CHD increases systems TCR monitoring frequency from semi-annual to quarterly when they fail to collect a semi-annual sample or have positive samples.

NOVs for M/R violations instruct systems to send back a signed/dated copy of the PN they post and a copy from the system was in the files for all the violations reviewed.

Major Recommendations:

The CHD should provide documentation in system files of disinfection and consecutive ND check samples following MCL violations.

The CHD's NOV letters for TCR MCL violations should instruct systems to send back a signed/dated copy of the PN it posts.

The CHD should issue fines to systems that fail to PN for MCL violations of \$1,000 per day up to the maximum amount of fine per violation of \$2,000 (for water systems that serve 10,000 or fewer people) in accordance with the State Administrative Fines Policy.

The CHD should enter all sample results into WaterTrack.

The CHD should issue systems that fail to collect all 4 TCR repeat samples on the same day following a positive routine sample with a minor repeat M/R (type 26) violation.

The DHD should instruct systems not to collect TCR routine samples from raw water taps.

The CHD should not issue systems L/C tap M/R violations after they have an action level exceedance because they are not required to conduct L/C tap monitoring again until after they install corrosion control treatment. Systems can voluntarily monitor before this, however, and can discontinue treatment installation steps after they collect the standard number of samples based on population that are below the action levels during 2 consecutive 6-month CPs.

The CHD should issue monitoring reminder and \$200 fine warning notices 30-90 days before the end of the CP for annual and less frequently scheduled monitoring. The CHD should issue a \$200 fine to systems that fail to sample, set a new sample deadline (that is

timely but gives the system sufficient time to complete the task), and warn the system it will be assessed a \$400 fine if it fails to sample by the new date.

Fine warnings in the CHD's NOV letters for M/R violation that warn systems they will be fined if they have any additional M/R violation within a 12-month period should be changed to conform with the state fine policy which states that administrative fine determinations for violations in one contaminant group do not impact the amount of the administrative fines for violations in another group.

The CHD needs to accurately track L/C initial tap monitoring and correctly assign systems to reduced annual and triennial monitoring and decrease the number of samples required for reduced monitoring to half the number required for initial tap monitoring.

CHD should initiate follow-up to L/C action levels more quickly.

The CHD should require systems conducting treatment studies to sample all drinking water taps by the end of the next 6-month CP; and report the results from treatment studies every 6 months including documentation that fixtures with sample results exceeding the lead and/or copper action level were removed or replaced and subsequent results were below the action levels.

Minor Recommendations:

CHD should report lead and copper action level exceedances for the correct CPs.

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
MI5220115	Tilden Township Hall	TN/25	11/2004 bacti monthly MCL	Yes-11/15/04 NOV letter says the Township Supervisor called on 11/15/04 and indicated system will use option 3 (use temporary PMs not to exceed 90 days). It tells the system to obtain 2 ND check samples after disinfection, and take 5 routine samples the following month. It appears from results in WaterTrack that the system disinfected based on 2 ND check samples taken on 11/30 and 12/1/04, and took 8 routine samples the next month in 1/05. However, this is not documented in the	According to the lab slips in the file, the 11/9/04 TC+ routine was a "raw well" sample and 2 of the five TC+ repeats samples (4 taken on 11/10 and 1 on 11/12), were also "raw well" samples. The MCL NOV letters notifies the system of the MCL violation, and gives it 3 options: close, use an approved alternate nearby water source, or use temporary precautionary measures (PMs) until the problem can be corrected. There were no bacti results for CQ2/04 in WaterTrack when Region 5 printed sample results on 5/26/06 to bring on the EV. However, a ND 5/10/04 bacti sample result was entered into WaterTrack after the EV. MDEQ's 4/17/07 response: The transition to WaterTrack from T2 involved a long period, from Oct. 2003 to Apr. 2004, where LHDs had no access to a database and tracking system. After the arrival of WaterTrack, there was a large backlog of sample data entry for LHDs to address. DEQ believes most LHDs successfully addressed the backlog of sample data entry, and that there are no "data gaps" in the WaterChem database. There may be an occasional sample or group of samples missing from or misidentified in the database. It is part of the LHD's quarterly routine to identify and fix these problems before submitting their violation records for review by the DEQ.

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				file. The NOV letter requires the system to post PN and provides a supply of PNs. However, it does not tell the system to send a signed/dated copy of the PN it posts to the CHD. A copy of the PN signed by the system on 11/14/04 is in the file.	
			10/2005 bacti monthly MCL	No- A copy of the PN signed by the system was not in the file. It appears from results in WaterTrack that the system disinfected based on 2 ND check samples taken on 10/31 and 11/1/05.	
				However, this is not	

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
		1 0p.		documented in the file.	
				The NOV letter requires the system to post PN and provides a supply of PNs. However, it does not tell the system to send a signed/dated copy of the PN it	
			12/05 bacti	posts to the CHD. Yes-The 1/17/06	Marquette CHD is commended for increasing system's bacti monitoring
-			minor M/R	NOV letter increases the system's bacti monitoring frequency	frequency to monthly because of repeated bacti quality problems with the well.
				to monthly beginning with 1/06 because of repeated bacti quality problems with the well.	This violation should have been entered into S/F as a bact major M/R (type 23) violation instead of a bacti minor M/R (type 24 violation). The wording of the fine warning in the 1/17/06 NOV letter does not conform with the state fine policy which states "Administrative fine determinations for violations in one contaminant group (Table 1) do not
				The NOV warns system it will be fined \$200 if it fails to collect a 1/06 bacti sample, or any other sampling events in a	impact the amount of the administrative fines for violations in another group. The CHD should have charged the system with a bacti minor repeat (type 26) violation for only collecting one repeat sample from the raw water tap on 10/10/05 following the TC+ 10/6/05 routine sample from

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				12-month period, and \$400 for any other subsequent failures in the next 12 months. The NOV letter requires the system to post the enclosed PN and requires it to send a signed/dated copy to the CHD. A copy of the PN signed by the system on 2/7/06 is in the file.	the raw water tap. **Correct, a violation was not entered into WaterTrack. The facility claims it collected all of the required results but only submitted to the LHD one of the four repeat sample results that showed a TC+ result. The facility is currently searching for the remaining sample results. If they are not found and submitted to the LHD, then a violation will be entered in WaterTrack. R5 response: As of 8/8/07 additional 10/10/05 bacti samples results had not been entered into WaterTrack, and a type 26 violation had not been entered into SDWIS.
MI5220189	St. Louis The King Church	TN/999	1 st half/2005 semi-annual bacti M/R	Yes* The 7/12/05 NOV letter warns system of a \$200 fine if it misses a second monitoring event within 12 months, and sets a new sample deadline of 7/31/05, and warns system that failure to sample by this date will result in a \$200	The NOV letter should have said the system failed to sample during the 1 st half of 2005 instead of the April-June quarter of 2005 because the system was on a semi-annual bacti monitoring frequency. The 7/12/05 NOV letter increases the system's monitoring frequency from semi-annual to quarterly. *MDEQ needs to clarify the procedures for semi-annual bacti, L/C, etc. monitoring at NCWSs under the state civil fine policy. MDEQ's policy and procedures for administrative fines for M/R violations prescribes different procedures for sampling events required once per year or less frequently, and for sampling events required more frequently than once per year. Semi-annual monitoring would fall under the procedures for sampling events required once per year or less frequently. However, the

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				fine, and \$400 fines for missing any subsequent samples within the next 12 months. It also requires the system to post the enclosed PN and send a copy of the signed PN to the CHD. A copy of the PN signed by the system on 7/15/05 is in the file.	"Civil Fines for Failure to Monitor" flow chart that MDEQ included in the package of information for implementation of civil fines sent to LHDs in 7/97 suggests that semi-annual monitoring should be handled under the procedures for sampling events required more frequently than once per. The footnote for the "No sample/End of Monitoring period=Issue \$200 fine" step of the flow chart reads: "For quarterly or more frequent monitoring only, a written warning (in lieu of first fine) is issued with public notice and FRDS." MDEQ's 4/17/07 response: MDEQ agrees that neither document specifically addresses which fines procedure should be used with cases of missed 6-month monitoring schedules. Either approach, warning after the first M/R violation or fining after the first M/R violation, is admissible under the Michigan Safe Drinking Water Act (SDWA), PA 399, 1976. It can be left to the judgment of the LHD as to which approach is most appropriate in a given situation.
MI5220072	Empire Mine	NT/ 1,000	2 nd half 1999 copper action level exceedance	Source water lead/copper monYes Optimal corrosion control treatment -No The CHD's 4/29/01 letter should have required the system to collect L/C samples from all drinking water taps by 12/31/01 (end of	CHD's 4/29/01 letter confirms 3/23/01 conversation with the system regarding its exceedance of the copper action level based on the 1.96 mg/l result for 1 of the 4 samples taken on 12/5/00 (per WaterTrack 3 were taken on 12/5, including the 1.96 mg/l copper sample, and 1 was taken on 12/4/00). This copper action level exceedance should have been reported to S/F for the 2 nd half of 2000 instead of for the 2 nd half of CY 1999. In its 8/24/01 letter to the CHD, the system says no copper was detected in its well water sampling (There are ND results for a sample taken from Wells A & B on 4/3/01 in WaterTrack) and the system proposes to conduct a treatment study to identify situations, sources, and/or other

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				the next 6-month compliance period) instead of 20 during the 1 st and 2 nd half 2001 compliance periods. Also, it appears the CHD did not contact the system regarding the action level exceedance until approximately 4 months after the end of the compliance period during which it occurred. The 4/29/01 letter required the system to collect source water L/C samples, and submit, within 6 months, a written proposal for implementing one of two treatment options: 1) installing corrosion control treatment, or 2) conducting a	problems within the distribution system that have caused elevated copper levels in some of their drinking water fountains, and says all drinking water taps will be sampled to identify all taps with elevated levels. It says, so far, it tested 14 of its 57 fountains and 4 had elevated copper levels, and that it will try repair/replacement at these and other fixtures it identifies and resample them to evaluate the effectiveness of remediation. It also says it will continuously flush affected fountains, in the meantime, to reduce copper exposure. In its 1/19/02 letter to the CHD, the system reports that it tested all 59 of its fountains during 2001 and 18 had copper or lead concentrations above state limits. It says these fountains will be removed from service, beginning immediately with completion expected by 6/1/02. The system also said it would continue to report to the CHD every 6 months on the results of their fixture repair or replacement and the proposed schedule for completing the entire program until the action levels are met. It appears that the system sampled all of its fountains during 2001, based on results for 20 samples collected during the 1st half of 2001, and 42 collected during the 2nd half of 2001 in WaterTrack. CHD sanitarian's 7/23/03 memo to file documents 7/22/03 conversation with Chuck Thomas, MDEQ, regarding system's 2nd half/03 L/C samples that exceeded the copper action level. Chuck Thomas confirmed his understanding that as long as the copper investigation continued to eliminate the locations where copper action levels were exceeded, they would be allowed to continue their

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				treatment study and	investigation/sampling program. The sanitarian also says that, as
				attempting corrective	discussed with Chuck Thomas, he will be asking the environmental
				measures. This letter	engineer at the mine to provide some type of file documentation as to
				or later written	what changes were made between the last two sampling events.
				communications with	
				the system also	
				should have required	
				the system to report	
				the results from its	
				treatment study to the	
				CHD every 6 months	
				following the	
				system's notice of	
				intent to conduct a	
		i		treatment study. The	
				system submitted a	
				written proposal to	
				conduct a treatment	
				study on 8/24/01. In	
				its 1/19/02 letter the	
				system summarized	
				the results of L/C	
				samples it collected	
				from its 59 drinking	
				fountains that were	
				collected during	
				2001. This letter says	
				the 18 fountains that	

SYSTEM ID	SYSTEM NAME	System Type/	Violations	State Action Follows Flow Chart?/	OTHER OBSERVATIONS AND COMMENTS
		Pop.		Discrepancies	
				had copper and/or	
				lead concentrations	·
				above the action	·
				levels will be	
•				removed from	
				service, beginning	
				immediately with	•
•				completion expected	
				by 6/1/02. The	
				system states in both	
				the 8/24/01 and	
				1/19/02 letters that it	
				will report to the	
				CHD every 6 months	
				on the results of their	h
				fixture repair or	
				replacement and the	
				proposed schedule for	
				completing the entire	
				program until the	
				action levels are met.	
				However, there is no	
				documentation in the	
				file that these 18	
				fountains were	
				removed, or that the	
				additional 9 fountains	
				which were sampled	

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				during 2002 and the	
				1 st half of 2003 that	
				had results above the	
				copper or lead action	
				levels were removed.	
				Water quality	
				parameter monitoring	
				These may be	
				postponed during the	
				initial treatment	
	-			study.	
			7-12/03	No - An NOV should	
			LCR M/R	not have been issued	An NOV should not have been issued to because systems are not
				because systems are	required to conduct L/C monitoring following an action level
		•		not required to conduct L/C	exceedance until after they install corrosion control treatment. Systems can voluntarily monitor before this, however, and can discontinue
				monitoring following	treatment after they collect the standard number of samples based on
				an action level	population (20 for Empire Mine) that are below the action levels during
				exceedance until after	2 consecutive 6-month compliance periods.
				the system installs	* .
				corrosion control	4/3/01 letter notifies the system that the LCRMR requires that all
				treatment. Systems	NTNCWSs collect the minimum number of L/C samples based on
				can voluntarily	population served, and Empire Mine must begin collecting 20 samples
	,	1.		monitor before this,	because, based on the last sanitary survey, Empire Mine serves 1,000
				however, and can	persons. It also says that past sampling has reduced Empire Mine's
				discontinue treatment	monitoring to frequency to once every 36 months. This letter was sent

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
				after they collect the standard number of samples based on population (20 for Empire Mine) that are below the action levels for during 2 consecutive 6-month compliance periods. The NOV letter requires the system to post the enclosed PN and send a copy of the signed PN to the CHD. A copy of the PN signed by the system on 5/14/04 is in the file.	after the system exceeded the action level in 12/00. Based on the history of L/C sample results in WaterTrack, it appears that the system was placed on annual monitoring in 1999, and also conducted annual L/C sampling for 2000 in 12/00 when it exceeded the copper action level. It also appears that the 4/3/01 letter should not have placed the system on triennial monitoring because the system had not collected 2 rounds of annual samples that were below the action levels after it completed initial tap monitoring. Also, the letter is incorrect in requiring 20 L/C samples for triennial monitoring for a system with a population of 1,000. A system with this population that is conducting reduced monitoring (annual or triennial) would only be required to collect 10 L/C samples. Empire Mine should have been required to collect 10 rather than 20 L/C samples when it placed back on annual monitoring in 2005. The 4/3/01 also says "It is very important to sample as early as possible in the monitoring period to allow you enough time to sample back into compliance if you exceed the action level. Otherwise, if you exceed the action level and are not able to sample your back into compliance prior to the end of the compliance period in which the samples were collected, you are required to provide public education, additional sampling, and propose a treatment option to either initiate a 'treatment study' or install corrosion control treatment." Presumably this wording was used in letters sent to all MI NTNCWSs in early 2001 regarding LCRMR requirements.
				1	MDLQ and the LnDs should not encourage systems to confect more L/C

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
					samples just to avoid an action level exceedance. MDEQ's 4/17/07 response: "MDEQ does not encourage systems to collect more samples just to avoid an action level exceedance. Rather, it is done for the purpose of learning more about a potential contamination problem. If a system collects the chart number of samples and may exceed an action level our procedure requires them to sample all drinking water taps at the facility to determine the scope of the problem, if they intend to use fixture replacement to address the elevated levels. If by the end of a 6-month sampling period, if 90% or more of the sampled taps are below the action level, then it would be no exceedance. MDEQ further expects that fixtures and piping known to be a problem will be removed even where the 90 th percentile does not exceed the action-level.
					The LHD apparently said the following in a 4/3/01 letter to the water supplier, 'It is very important to sample as early as possible in the monitoring period to allow you enough time to sample back into compliance if you exceed the action level. Otherwise, if you exceed the action level and are not able to sample your way back into compliance prior to the end of the compliance period in which the samples were collected, you are required to provide public education, additional sampling, and propose a treatment option to either initiate a 'treatment study' or install corrosion control treatment.'
					MDEQ's early 2001 model letter, intended for LHDs to make use of if they wish, says, 'It is highly recommended sampling be conducted and reported <u>early</u> in the monitoring period. Starting now will allow adequate time to comply with these complex regulations. Also, if initial results indicate the action level would be exceeded for lead or copper,

SYSTEM ID	SYSTEM NAME	System Type/ Pop.	Violations	State Action Follows Flow Chart?/ Discrepancies	OTHER OBSERVATIONS AND COMMENTS
MI5220074	Tilden Magnetite Partnership	Pop. NT/800	2002-2004 IOC M/R	No- CHD should have sent the system a sample reminder and \$200 fine warning (R/FW) notice approximately 30 days before the end of the compliance period (CP), assessed a \$200 fine for failure to sample by the end of	you will need to contact the (local health department) for further instructions and assistance before the monitoring period expires.' As always, if there is an exceedance at any one tap, MDEQ and the LHDs expect all drinking water taps and source water to be sampled in order to calculate the 90 th percentile value. One might construe this as sampling one's way back into compliance, but actually it is sampling for the purpose of determining compliance." The 4/5/04 NOV and fine are not in S/F. 1/25/05 NOV (SIA) and PN request (SIE) in S/F is not in the file. **Correct – the 4/5/05 NOV was issued after LHD discovered the 1/25/05 NOV was not in file. Will enter the 4/5/05 NOV (SIA and SIE) to reflect file documentation. R5 response: As of 6/13/07 the 4/5/05 NOV had not been entered into SDWIS. 3/30/05 RTC (SOX) for the violations are confirmed by 3/21/05 IOC results in WaterTrack.
				the CP, and set a new sample deadline (that is timely but gives the system sufficient time to complete the task), and warned system it will be assessed a \$400 fine	

SYSTEM	SYSTEM	System	Violations	State Action Follows	OTHER OBSERVATIONS AND COMMENTS
ID	NAME	Type/		Flow Chart?/	
		Pop.		Discrepancies	
				if it fails to sample by this date.	
				4/5/04 NOV letter with \$200 fine	
			7.0/021	enclosed.	
•			7-9/03 bacti monthly MCL	Yes The 0/9/02 NOV	9/8/03 NOV letter says TC+ samples taken on 9/4/03 resulted in an MCL violation.
			MCL	The 9/8/03 NOV letter requires the system to post PN and provides a supply of PNs. However, it does not tell the system to send a signed/dated copy of the PN it posts to the CHD. A copy of the PN signed/dated by the	A single 9/4/03 sample taken at the nurses station-pit was TC+ and 3 of 4 repeat samples taken on 9/6/03 were also TC+ (one of these was also taken at the nurses station-pit). The lab slips for these samples, and a TC+ sample taken on 9/29/03 are in the file but results for these samples are not in WaterTrack. **Correct, but samples are now entered into WaterTrack. R5 response: As of 8/8/07 these sample results are not showing up in WaterTrack. There is no documentation in the file of the CHD notifying the system to take 4 repeat samples after either the 9/29/05 or 2/17/05TC+ routine samples.
				system is in the file.	It appears that the system should have been issued a bacti minor repeat (type 26) violation following the 9/29/05 TC+ routine sample because it took 2 repeat samples on 10/1/05, and 2 on 10/2, instead of taking all 4 on 10/2.
					9/15/03 letter to system confirms completion of investigation, disinfection, and successful sampling into compliance for the 9/4/05 MCL violation. It says the investigation could not determine cause of

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ws OTHER OBSERVATIONS AND COMMENTS
the TC+ samples prior to disinfection, and requires 5 routine samples
during 10/03. It says these samples may be collected from the same tap
at the same time.
However, systems must collect samples at regular time intervals
throughout the month, except that a system that uses only ground water
that is not under the direct influence of surface water, and serves 4,500
persons or fewer, may collect all required samples on a single day if
they are taken from different sites. It appears that this system has at
least two distribution system sampling sites: the kitchen sink, and nurses
station-pit. **LHD was lead to believe one sample location was
proper. LHD will address this issue in future correspondence.
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The 9/15/03 letter also places the system on quarterly bacti monitoring
frequency as a result of the TC+ results. However, according to
WaterTrack the system had already been placed on quarterly bacti
monitoring frequency in 1997.

^{**}LHD comments on the draft EV chart (in italics)